

Desert

MAY, 1952 35 Cents





Hedgehog in blossom. Photo by Josef Muench.

DESERT IDYL

By WANDA GUERRERO

The far-flung hills that bind my lonely days
Within an everlasting solitude,
In recompense for loneliness, bestowed
Unto my hand a tithe of gifts. With these
I wrought fulfillment of a dreamer's mood—
A desert idyl off the beaten road.

A wide oak's verdure canopies the sun
Where cobbled path and rock-laid portal
meet;
Wild four o'clocks, their purple petals blown,
Flaunt brilliant banners at the open gate.

Should I desert this rustic heritage
For worldly pelf, for fancied joys that lie
Somewhere beyond the bounds of rim-rock's
edge,
My heart, in sorrow sealed, would bleed and
die.

THE ROCK COLLECTOR

By WILDA BESSIE TOTTEN
Yucca Valley, California

I've a hobby that suits my habitat here—
Out in the cactus and sage;
It's collecting rocks, exciting and rare,
Be-lichened, and hoary with age.

Each new one intrigues me, invites me to
learn

The story that's held in the stone—
Pressed in by the ages, since aeons ago,
For me to decipher alone.

My rockery grows, and my knowledge keeps
pace,
The stories have waited so long;
I must read each with haste, arrange them
with care,
And sing of them all in my song!

WISE DESERT RAT

By AMY VIAU
Santa Ana, California

He was called by some a desert rat,
And he wore stout clothes and a wide
brimmed hat
That shadowed his face, dry as parchment
old;
And he spoke of the different kinds of gold.

One kind, he said, was the gold from ore
Which a man might have and still be poor,
Unless it were mixed with a gold within
Which he'd gleaned from—maybe some-
where he'd been.

Now he had been in the desert with its
golden moods
While wearing its sunrise and sunset hoods.
And the wealth was as great upon its sand
To be gleaned, when the moon was a full
gold band.

But the desert's silence, he explained, then
Was the gold that made the richest men.

HUT IN THE PALMS

By PAUL WILHELM
Thousand Palms, California

Our palm log hut in this desert grove
From the noon sun hid by sheltering leaves,
Where the children's eyes are glad with love
As they watch wild birds beneath its eaves.

Long lived in now, these rooms and hall
And fearless here, our lowly sleep,
Secure each hallowed palm log wall,
We pray the homeless rest as deep.

We know by the willow smoke gracefully
curled
At night above palm trees growing near,
That if peace exists in this wide, wide world
A heart that was humble might find it here.

Cactus Bloom

By MIRIAM R. ANDERSON
San Bernardino, California

The glowing golden hearted cactus bloom
Whispers to me a haunting desert tune.
Revealing clefts, and fastnesses of rocks
That reach far up to the horizon's top,
And loom protectingly to hold
The sunlight in this gallant desert gold.
Warm on my heart as sun-washed sand at
noon,
Poignant as wind songs, through a mesquite
lane,
Memories of cactus, silvered in the moon,
Drift from a desert night, when it is on the
wane.

HAUNTED LAND

By JACK SPEIRS
Camarillo, California

The miles of sand, the haunted land
Is silvered by the moon.
Apache ghosts in endless hosts
Are riding through the dunes.

It almost seems I hear their screams
And warwhoops ring once more,
From shimmering waves of phantom braves,
Across the desert floor.

Ghosts from out of yesterday
Appear and fade away.

For when at night the sands are white
The tribes of ghosts arise
To haunt the land, a homeless band,
Beneath the desert skies.

Through sand and sage the riders rage.
They never turn aside.
Their eyes agleam, the warlocks stream
Behind them as they ride.

Ghosts from out of yesterday
At dawn must fade away.

AN ADOBE HOUSE

By LUCILLE SANDBERG
Willows, California

Born of the earth, was this house.
It stands now, seasoned well
With all the things most precious known:
Love and devotion and a family grown.

Through the window picture frames,
The gold of morning sun steals in
To greet the one who rests within;
Or just at dusk, against yon hill,
A tiny moon and evening star will
Make but yet another scene.

The muted sounds which cross the court,
The chattering birds at grey of dawn,
Or padded step upon the stone outside—
All these are soothing as the music
Of a symphony. I tell you . . .

From these solid, adobe walls it seems
A quiet strength flows forth to bring
Peace to those who dwell within.

Eternal

By TANYA SOUTH

There still are all the hills, the vales,
The boundless sky and sea,
And Truth untempered still prevails.
And all eternity
Is still about on every hand.
Oh, had we eyes and ears,
And hearts and minds to understand
All that appears!

DESERT CALENDAR

April 27—20th Annual Spring Festival, Hi Vista, California.

First of May—Continuation, exhibit of paintings of Mojave Desert wildflowers by Jane S. Pinheiro. Antelope Valley Branch, Los Angeles County Library, Lancaster, California.

May 1-3—Fourteenth Annual Las Damas Ride, Wickenburg, Arizona.

May 1-31—Navajo and Pueblo watercolor paintings and handicrafts. Southwest Museum, Highland Park, Los Angeles, California.

May 2-3 — Masque of the Yellow Moon Pageant, Phoenix, Arizona.

May 2-3—Third Annual Spring Festival, Community Center, Apple Valley, California.

May 3 — Indian fiesta, corn dances and ceremonial races. Taos Pueblo, Taos, New Mexico.

May 3—All-day trip to Toro Peak near Santa Rosa Peak. Desert Museum, Palm Springs, California.

May 3-4—San Diego Chapter, Sierra Club, rock-climbing trip to Joshua Tree National Monument, California.

May 3-4 — Seventh Annual Turtle Races, Joshua Tree, California.

May 4-5—Annual Fiesta de Mayo, Nogales, Arizona, and Nogales, Sonora, Mexico.

May 8—Song Festival, Encanto Band Shell, Phoenix, Arizona.

May 9-11—Lone Pine Stampede — rodeo, celebration, western dances. Lone Pine, California.

May 10-25 — 26th Annual Julian Wildflower Show, Community Hall, Julian, California.

May 12—Founder's Day Celebration, Chandler, Arizona.

May 15—San Isidro Fiesta and Blessing of Fields, Los Cordovas, near Taos, New Mexico.

May 15-18 — Elk's Helldorado and Rodeo, Las Vegas, Nevada.

May 17-18 — Desert Peaks Section, Southern California Chapter, Sierra Club, hike to Telescope Peak and Wildrose Peak, near Trona, California.

May 17-18—Spring Rodeo, Winnemucca, Nevada.

May 27-28 — Uintah Basin Junior Livestock show and sale. Vernal, Utah.

May 30-June 1—Desert Peaks Section, Southern California Chapter, Sierra Club, hike to San Francisco Peaks, near Flagstaff, Arizona.

May 31 — Early California Spanish Fiesta, Morongo Valley, California.



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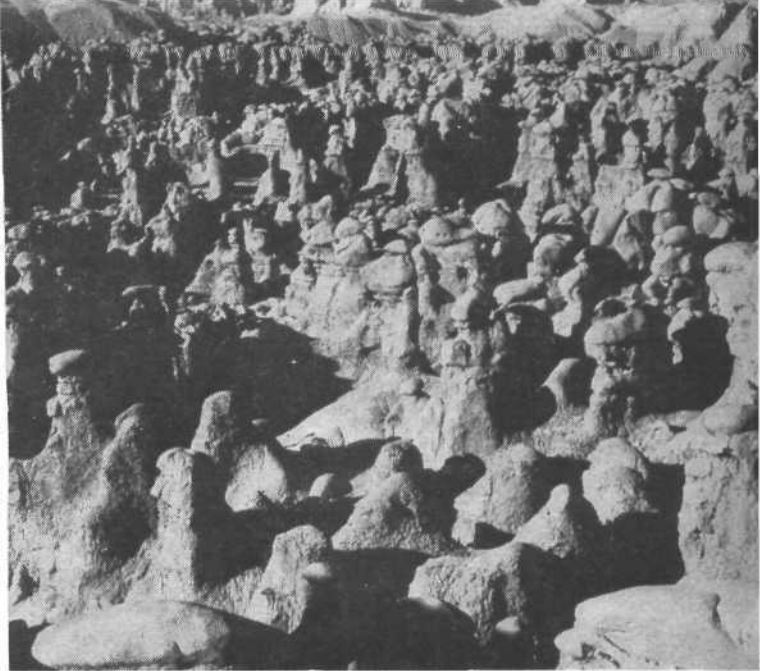
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Goblins in Flame-Colored Stone

By CHARLES KELLY

Photographs by P. W. Tompkins
Map by Norton Allen

IF Dante had visited Goblin Valley, Utah's latest scenic discovery, he would have found in stone all the grotesque forms needed to illustrate his *Inferno*. There, within the space of a few hundred acres he would have been face to face with a fantastic array of goblins, monsters and demons—surrounded by the faces of tortured souls—all petrified in flame-colored rock.

All sense of reality is lost as one wanders among the thousands of strangely eroded formations where no imagination is required to see shapes resembling mythical beasts, dragons, prehistoric monsters, giants, dwarfs,

Mother Nature must have been in an impish mood when, with the tools of erosion, she carved the thousands of fantastic forms discovered in recent years in a remote sector of southern Utah. Here is a fantastic land awaiting further exploration—a veritable dreamland for photographers.

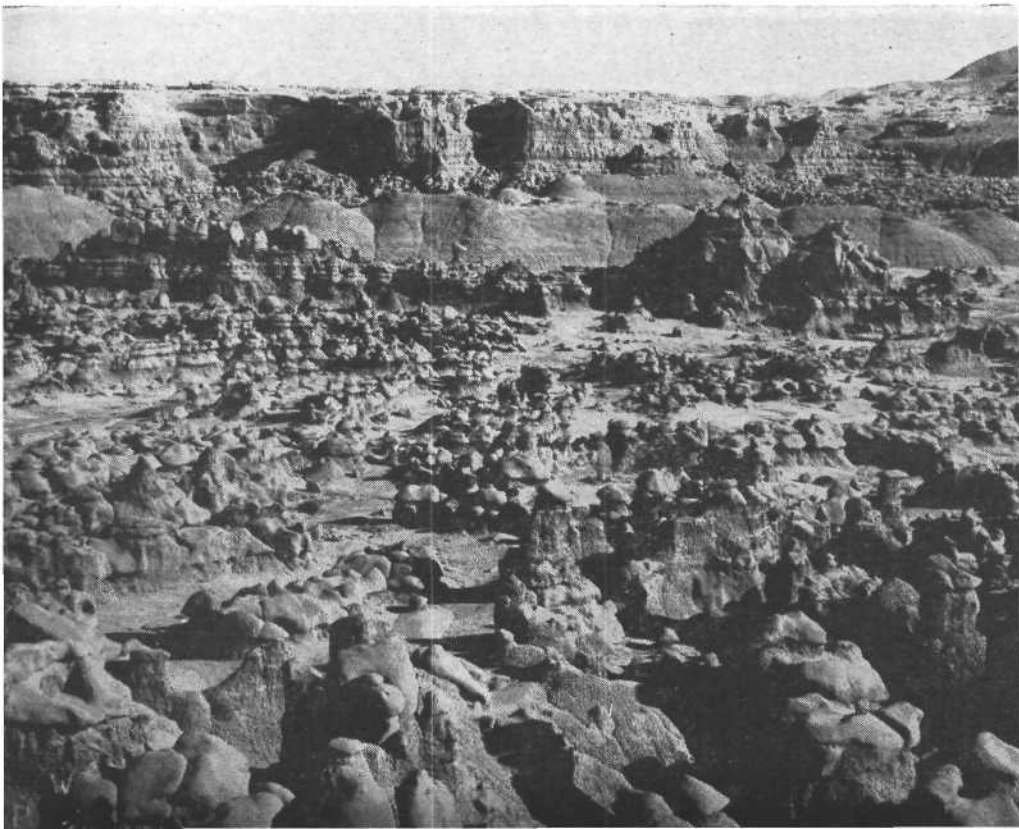
cartoon characters, well known animals and historic faces. Those who have photographed these strange results of erosion come away with the impression of having spent a day in some mythical underworld inhabited by all the strange beasts and goblins of ancient legend. While Goblin Valley does

not contain the color and artistic beauty of Grand Canyon or Bryce Canyon, it does have a unique fascination of its own.

It seems odd that such an interesting area has remained so long unknown; but Utah is still full of scenic surprises. An old road from Hanksville to Greenriver, Utah, passed within a mile of the place, and of course cowboys have been visiting it occasionally for many years; yet its value as a scenic area was not discovered until 1949, when Arthur Chaffin, Worthen Jackson and Perry Jackson guided P. W. Tompkins to the valley to make the first photographs. Their unanimous choice of a name was Goblin Valley. Tompkins, a well known photographer of Utah scenery, returned again in 1950 for more pictures. Few photographers have visited the place and much of it is still unexplored.

With a penciled map furnished by Perry Jackson I visited Goblin Valley in the spring of 1950, starting from Capitol Reef National Monument and driving 45 miles east to Hanksville. From the Fremont river bridge I then drove north 24 miles on the Hanksville-Greenriver road to the Temple Mountain turnoff, marked by a rusty mailbox and weathered wooden sign. Two miles west on this road is Garvin's ranch.

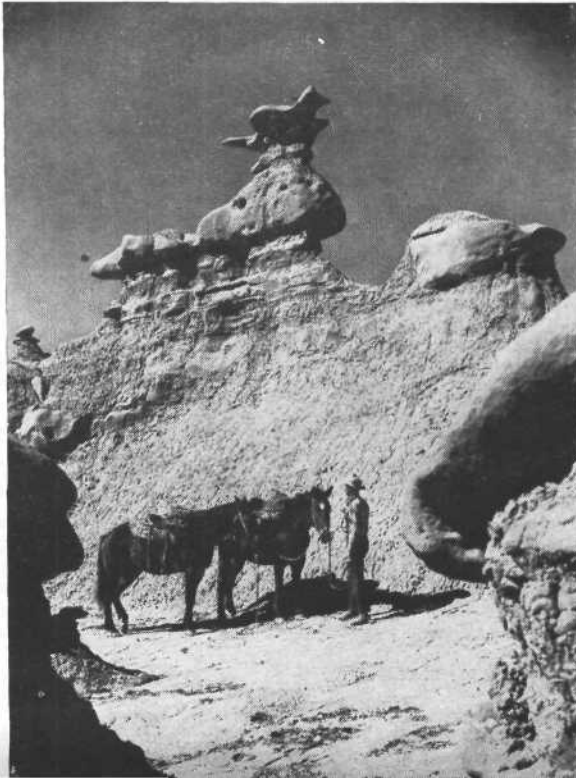
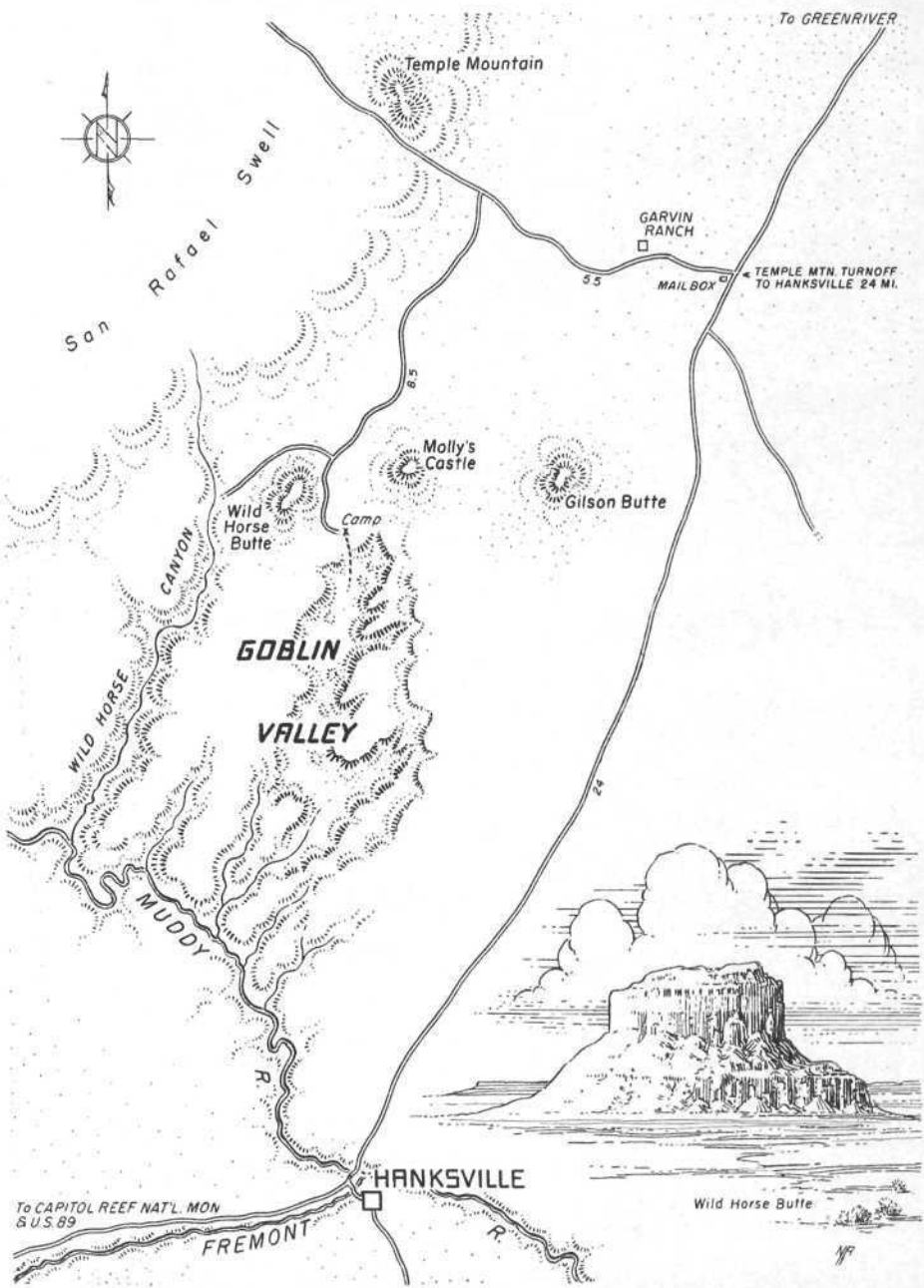
Continuing west toward Temple Mountain, a prominent peak in the San Rafael Swell, and taking every lefthand turn at road junctions, I found a dim road at 5½ miles from the mailbox and turned south toward Wild Horse Butte, a prominent landmark. At 12 miles there was another dim trail turning left, which is the Goblin Valley turnoff and passes just east of Wild Horse Butte. Half a mile north

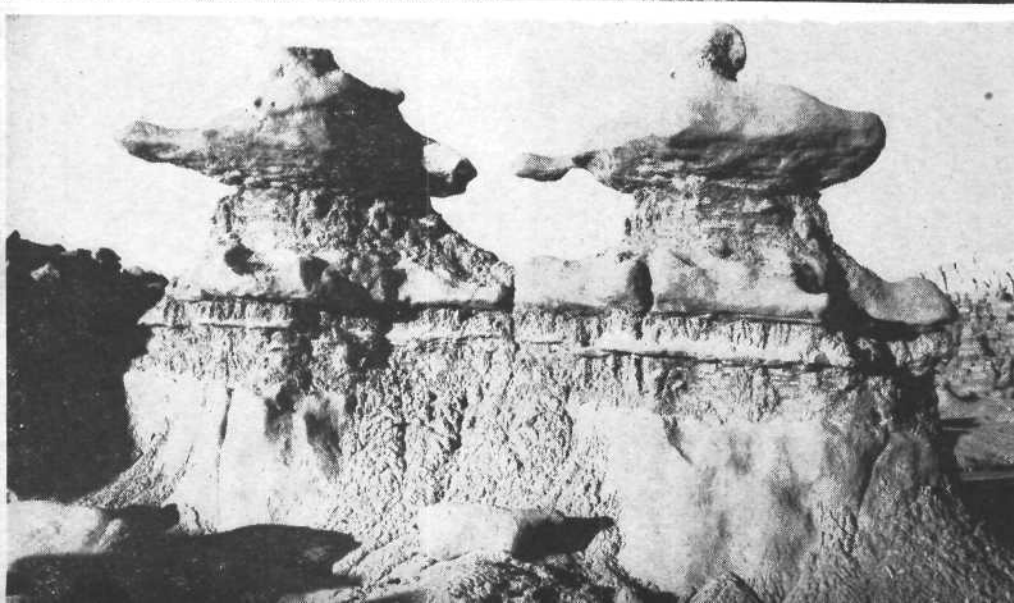
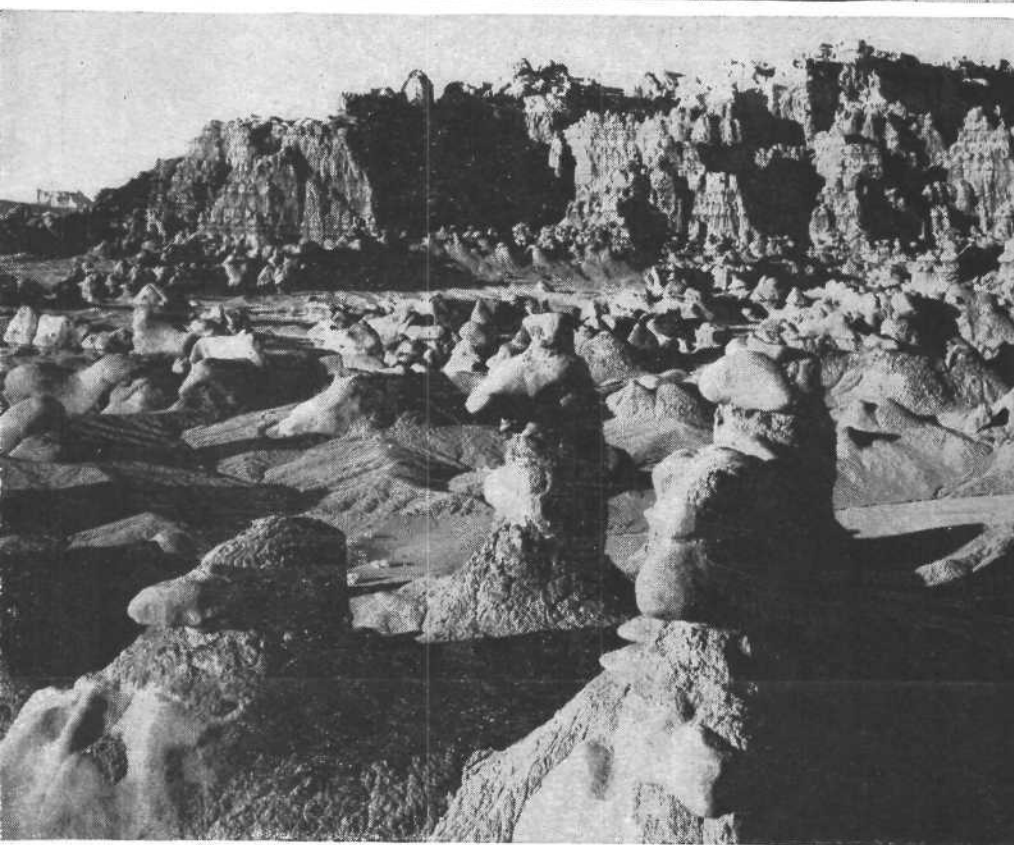
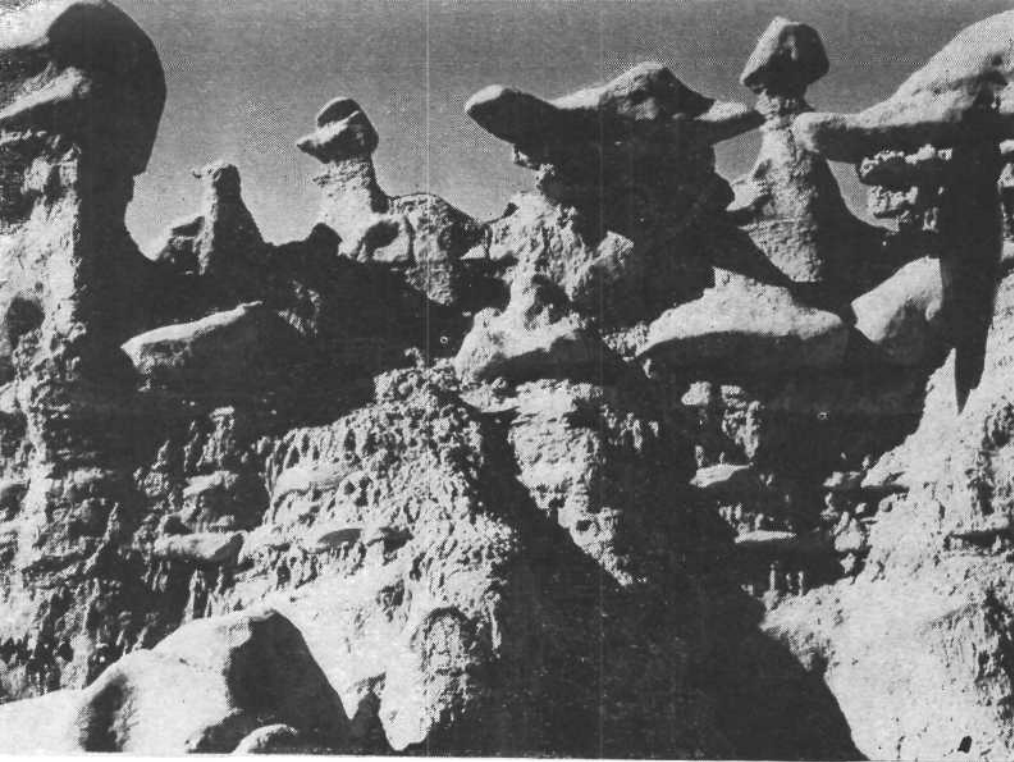


of the butte a large sand dune has been blown across the road which under usual conditions can be negotiated only by jeep. Continuing a short distance to a sculptured cliff, the road turns east one mile to a camping place—the end of the road. Total distance: 14 miles from Temple Mountain turnoff. Most of this distance is rough going, but can be driven in an ordinary car with care, as far as the sand dune.

After reaching the end of the road it is necessary to walk half a mile east over a series of rolling clay hills. At the top of the last rise a view of Goblin Valley makes one catch his breath and wonder if he has accidentally lost his way and wandered into the nether regions. On the nearly flat floor of the valley stand thousands upon thousands of grotesque forms, each on its own pedestal like statuary in a museum, singly, in groups, and in columns. In the background a sculptured cliff forms the eastern boundary of the valley.

Geologically, the desert surface surrounding Goblin Valley is of the Carmel formation. A remnant of the Entrada, from which the valley is carved, stands boldly upon this surface, with a few other isolated remnants to the north. Wild Horse butte is composed of Entrada at the base, Morrison in the middle and Summerville on top. In the great San Rafael Swell, just to the west, of which Temple Mountain is the highest point, Navajo sandstone can be seen dipping sharply underground all along its eastern flank. Toward the east, beyond the Flattops which mark the location of Robbers' Roost, all these formations run out, to be replaced in the Standing Rocks country along Green river by other colorful rocks of the same general com-





position, but bearing different names.

The section of Goblin Valley first seen is about two miles long and from one-half to a mile wide. Days could be spent in that one area without seeing all it contains. But two miles farther south, following a dry drainage channel, brings one to a larger and more spectacular area in the same formation, filled with hundreds of pinnacles and spires besides thousands of goblin shapes. From a high point above these can be seen several other areas equally promising but as yet unexplored.

During the summer of 1950 visitors began applying names to the various formations: the King's Men, Queen Victoria, Brigham Young, the Fat Lady, Mickey Mouse, Pluto, the Flying Turtles, Seal Beach, Minarets of Bagdad, the Chess Board, the Dinosaurs, Hunchback of Notre Dame, the Petrified Sheep, Woodchuck Conference, Twin Toadstools, Donald Duck, Grandpa, Hoodoo Heaven, Goofy Gulch, and so on; but the possibilities are limitless and each new visitor has the opportunity to apply any new names that strike his fancy.

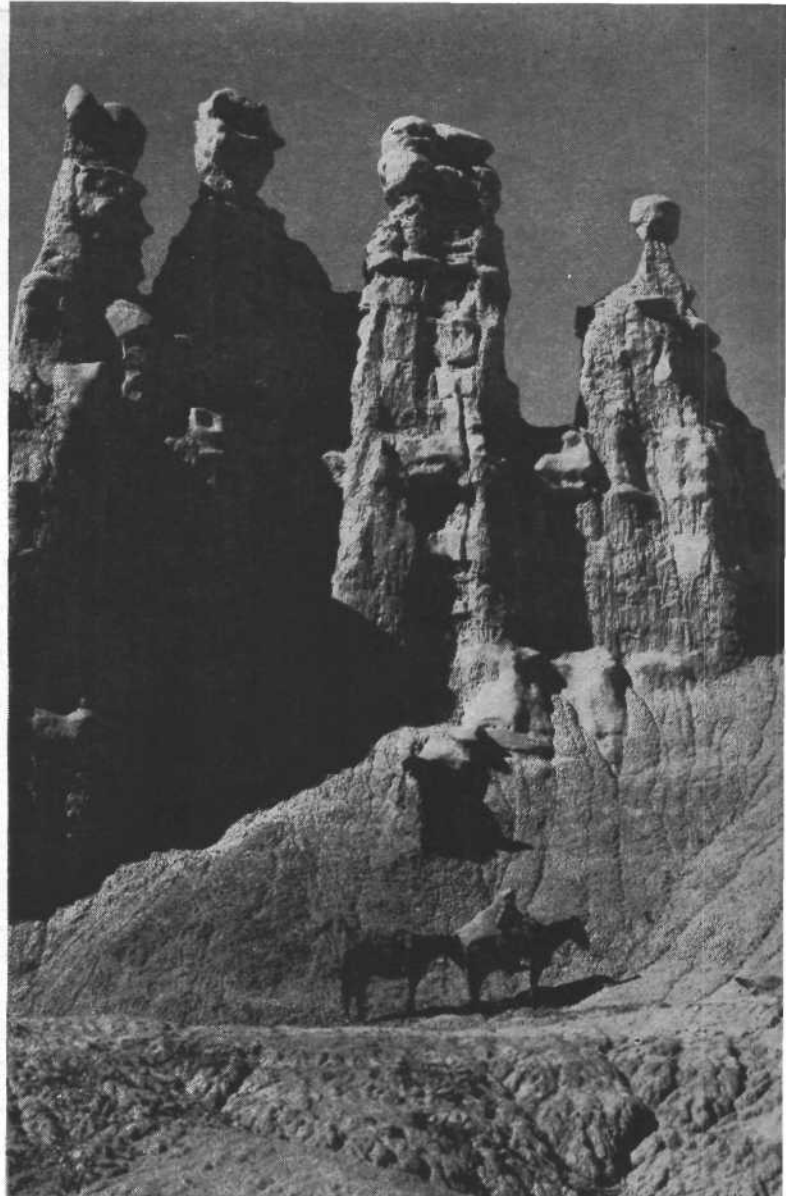
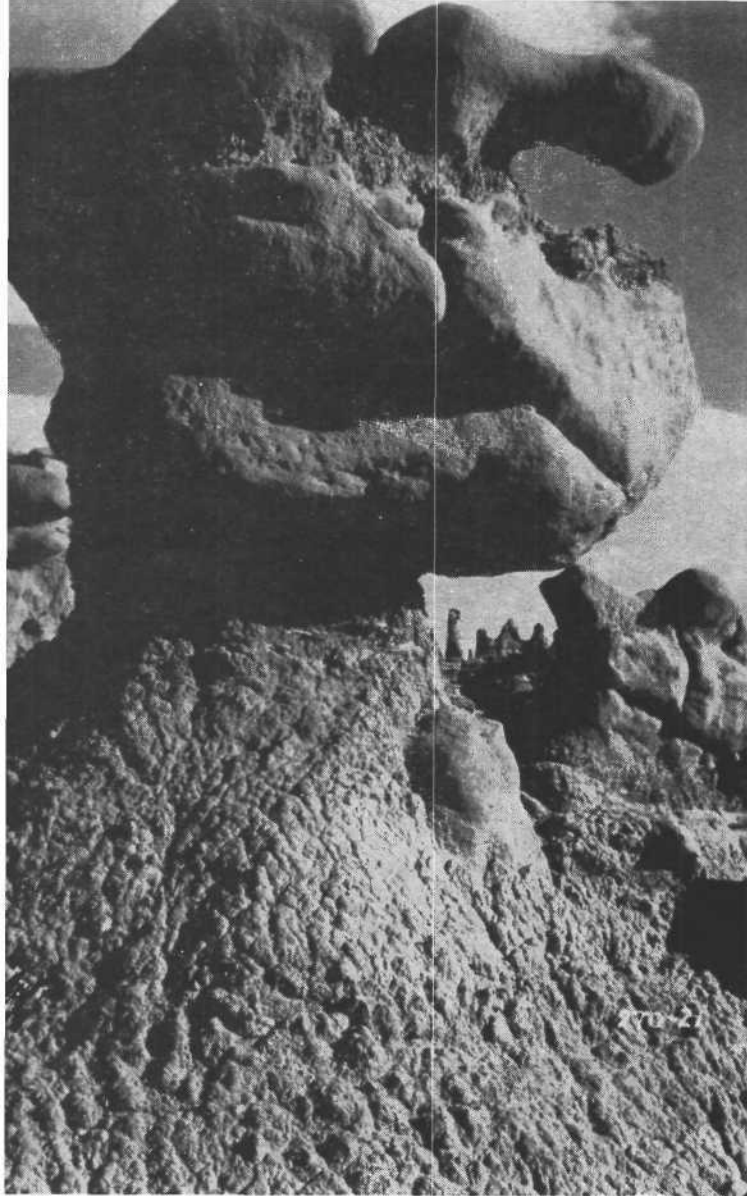
To those who anticipate visiting this new discovery I suggest that they plan their trip to arrive at the campground by 3:00 p.m. Then walk over the hills into the valley, do some exploring, and wait for the late afternoon light and long shadows, since lighting is too flat during the middle of the day. Stay over night and go back again for early morning pictures. You will find many fantastic forms you missed the previous day. If time permits walk south about two miles to the second big area which is more interesting than the first.

There is no water in Goblin Valley, so a sufficient supply should be carried. In case of emergency water can be found in the canyon just west of Wild Horse Butte.

While Goblin Valley is not connected with Capitol Reef National Monument, it is in the same general vicinity, and many of those who visit the Reef will want to extend their trip to cover this new scenic attraction. A log of the route can be obtained from the monument superintendent.

After wandering among the unnumbered formations of Goblin Valley for a few hours the visitor will be overwhelmed by their number and variety, and will realize the impossibility of ever photographing all the interesting subjects. My advice is to shoot, shoot, and keep shooting as long as your film lasts; the results will be better than expected.

Goblin Valley can be reached from either Hanksville or Greenriver over a desert road which is sometimes good but frequently rough. There are lunch room, gas station and limited accom-

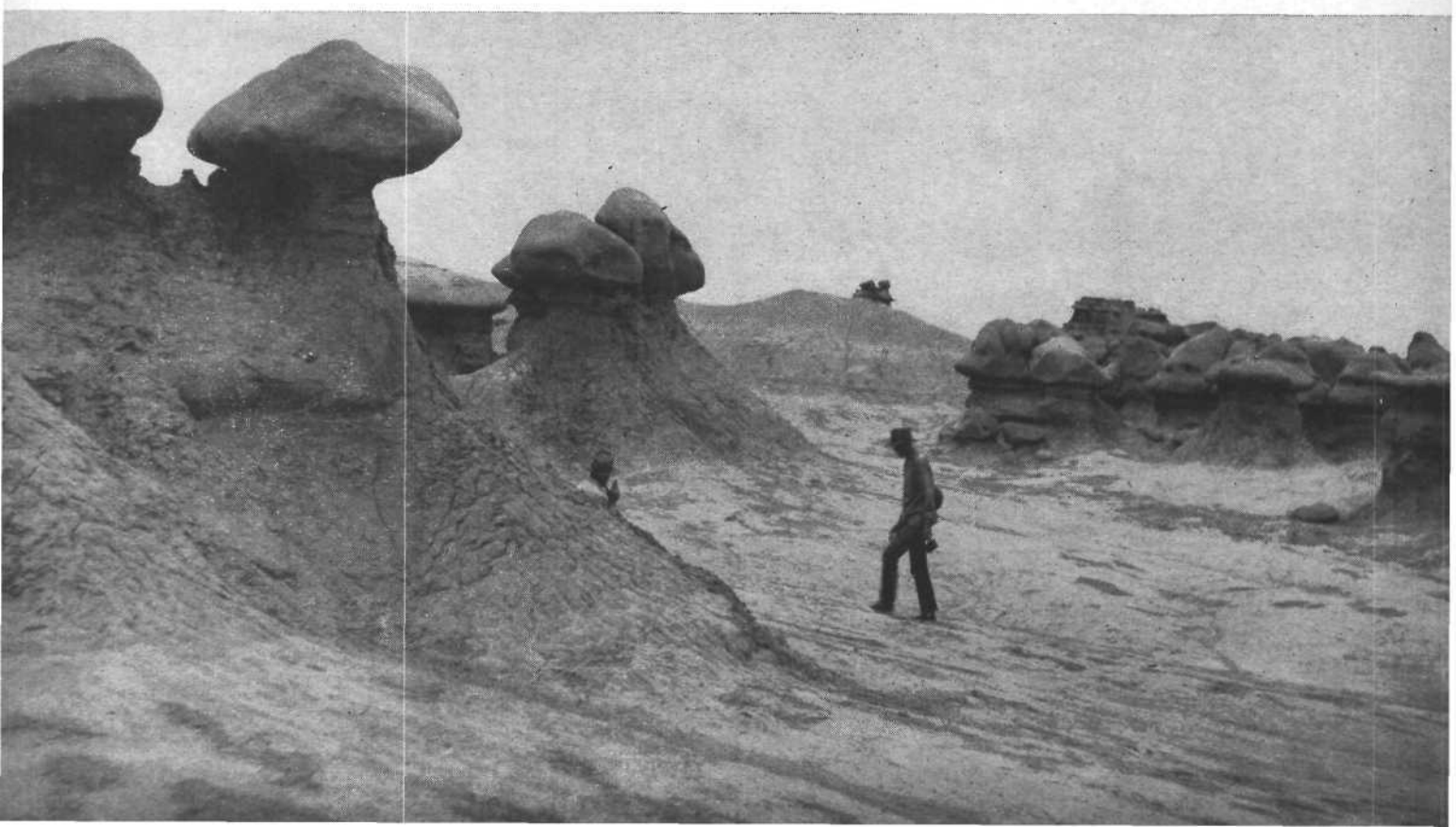


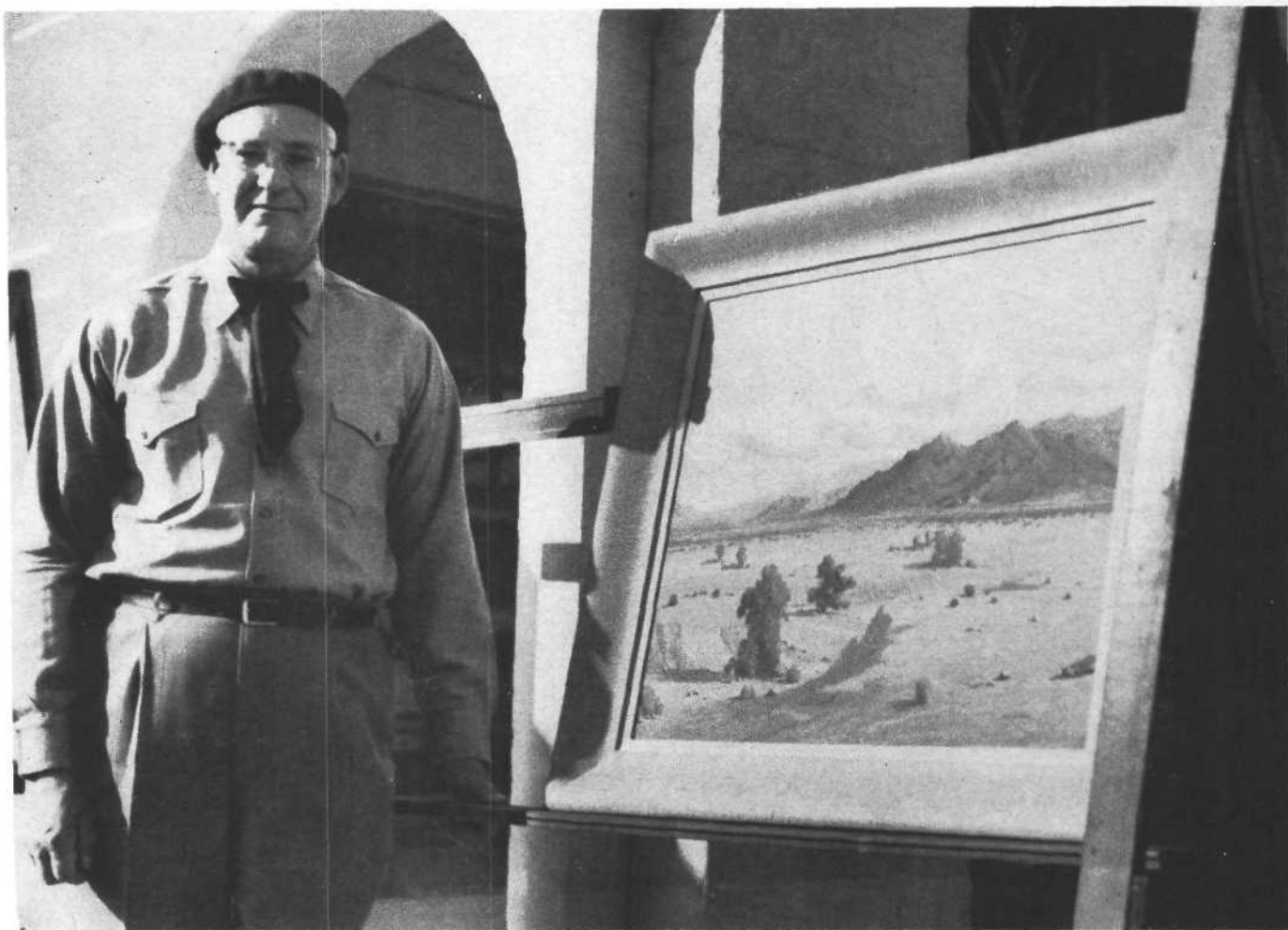
modations in Hanksville. The best way to travel is by jeep, but ordinary cars can get within about two miles before encountering heavy sand. Carry

a shovel and plenty of water. The Jackson brothers, of Fremont, Utah, will conduct jeep trips on request.

For those who like their desert wild

and unspoiled, and for those who want something new and startling in pictures, a trip to Goblin Valley will more than repay the effort involved.





Michael Malloy with one of his recent desert paintings "The Barranca."

He Found Dignity in Art

By JOHN W. HILTON

THE SCENE was in Kid Howard's Arcade in Chicago, the year 1925. A big man had just entered the gymnasium and was being greeted by the veteran trainer Jack Blackburn.

"Well, Mike," he drawled "I s'pose you-all's sort of big stuff now that you won a fight in Madison Square Garden. I s'pose there's no stoppin' you now."

It was a gentle voice that answered—entirely too gentle to fit the great physique of a heavyweight boxer. "No, Jack, you're wrong—quite wrong. I'm not going on to be a fighter. I have decided to quit the game. I like sports. That is why I took up boxing. You know as I do, it was an accident that got me into it professionally. You know well enough that if the taxi door had not slammed on Jumping Joey McCann's hand and broken some fingers, I would never have gone into that preliminary bout. I would not

Michael Malloy was a trapeze performer in a circus, a professional prize-fighter, a law student—and then he found the thing he really wanted to do, and for many years he has been a painter of the desert landscape. Here is the story of a successful western artist whose home is at Twentynine Palms, California.

have put up the fight I did if I had not been matched with a man who thought this would be his chance for an easy knock-out. I don't think the game is for me, Jack. I've had enough professional fights to know. This is the third in the Garden. Just look at this picture."

Jack Blackburn scrutinized the newspaper photo the other man took out of his pocket, then looked at his friend and smiled. "You sure was knocked down in that third round all right but

you won in the end. That's what's important, Mike, you won. We all gits knocked down in this game sooner or later, but we gits up and goes on. Tain't nuthin to be 'shamed of."

"But I don't like it," the big man replied. "Look at the clumsy pose the photographer caught as I was going down. Look at the expression on my face. I tell you, Jack, it isn't dignified and I'm going to quit. I think I'll try to make something of myself as a painter."

Jack studied him a moment through half closed eyes and then his face broke into a wide smile. "Well, you all surely did pick on somethin' dignified, Mr. Mike—mighty dignified. I saw some of the things you draw and they're mighty pretty, so you jist go on bein' dignified an' come in and see me sometime."

They shook hands and Michael Malloy walked out of the Gym into a new life—the life of an artist.

There had been other things before this fight game had claimed him. For

a while, he had been with Ringling Bros. and Barnum and Bailey's Circus, where he had met and made friends with Charlie Ringling and Lillian Lietzel, the great aerialist. It was through the influence of the latter that Michael became a man on the flying trapeze. This lasted until he had a fall and was injured. After that he worked with the elephants and whatever he could do around the circus. All this time he had been drawing and painting a bit, and studying when he could.

Michael Malloy found, as others before him had discovered, that being an artist was a good deal more than just starting in and painting. There were years of study and uncertainty—years in which he wondered at times if it was really worth it. Even dignity might have too high a price.

He studied with the famous Paul Evans and Romero Hansus in Chicago. He wandered West and at one time decided to quit painting and take up law. Near the end of the second year of his law studies, he became ill and his doctor advised that he get out into the open.

His doctor knew a retired medical man in Sonora, Mexico, who had a gold mine and he suggested that Michael and another patient should team up and go down to visit his friend and perhaps do a bit of prospecting.

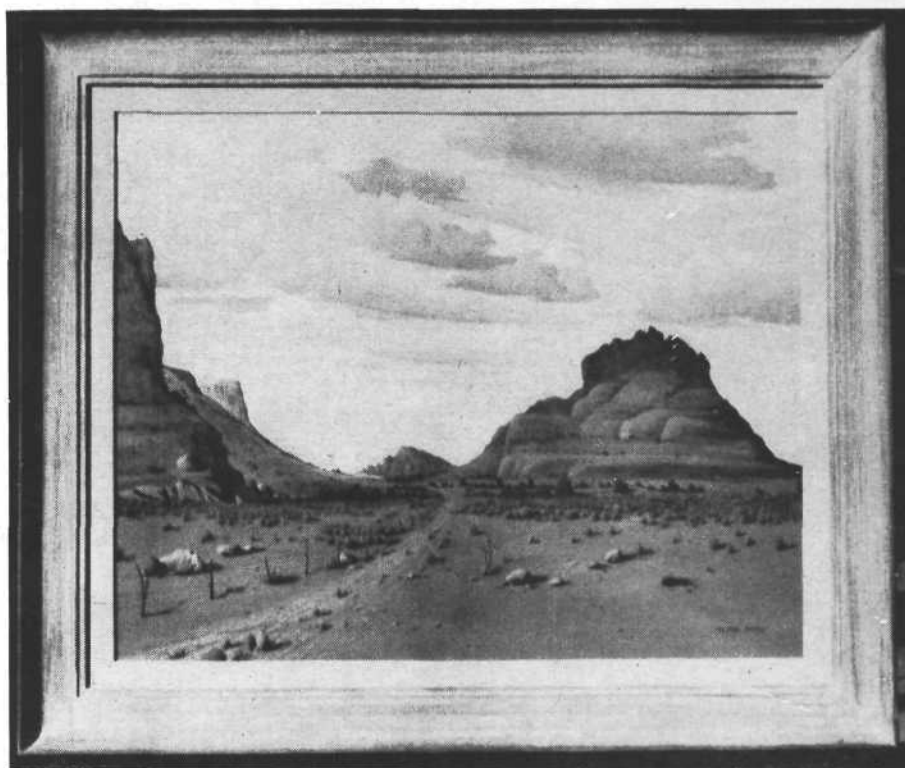
The pair arrived at the border, only to learn that an uprising was in progress among the Yaqui Indians. They spent several days trying to get across and finally had the luck to meet a Mexican citizen in one of the government offices who knew the medical man they wanted to visit. Finally, they crossed the border with a paper which Michael prizes to this day. It stated that he and his partner could cross the border for a period of thirty days.

"But, *Senor*," Michael had expostulated, "we want to stay much longer than thirty days—we might want to stay six months."

The new found benefactor smiled suavely. "But look at the paper more closely. You will notice it is not dated, my friends. It is very official looking, *senores*, and I am sure no one will question it. Dates—" he shrugged his shoulders and smiled again. "We cannot be bothered with dates. Have a good trip and find much gold."

Against the advice of every American in Nogales, they crossed the border with their old car loaded with provisions, mining tools and even a case of dynamite. It was a nice load to carry into the teeth of a brewing revolution.

Two days later things really started happening. They ran into a road block of logs and, seeing no one, decided to



Malloy's painting of the sandstone country in northern Arizona "Off the Beaten Path."

remove some of the logs and drive on, but as they got out of their car they were confronted with a circle of rifles and saw the glint of others coming out of the heavy brush.

Soon they were in a Yaqui camp where they were questioned, but treated well. The next morning, Michael remembered seeing a pair of Federal soldiers hanging by their necks from a nearby railroad trestle. This was an opportunity, he thought, to get a picture for a newspaper friend.

There was a camera in the car. They appeared to have free run of the camp, so he strolled nonchalantly toward the grizzly sight under the trestle and when he was within good photographic distance opened the camera and snapped several shots.

Just then a very large Yaqui Indian on horseback came up behind him. He could speak some English. "Eet ees a good camera that you carry *senor*, no?"

"Yes, it's a pretty good camera, all right," answered Michael, trying to keep his voice steady.

"Let me see eet, please," said the Yaqui and stooped over to take it from Michael's hand. Then he opened it as carefully as if he knew all the mechanisms of good cameras and removed the spool of film with equal care. Very deliberately, he unrolled the film and held it up to the sun. Then, with great deliberation, he rolled it up and put it back into the camera and carefully closed its back.

Handing it back to Michael, his face showed no change of expression. In the same calm conversational tone, he warned. "Eet ees not good to take peectures here — not healthy," and rode away.

Needless to say, Michael kept his camera out of sight and decided to let his newspaper friend take his own war pictures. A few hours later they were politely released when a sort of chief appeared and found that they were friends of *El Doctor* and were going to see him.

The rest of their trip was more or less uneventful, at least compared to the Yaqui interlude, but the only gold they found was in the hearts of some of the Mexican friends they made. Michael came back to the states with a great admiration for the Mexican people and a decision to drop his law studies and paint—paint out of doors where it's healthy.

It was his western landscapes that eventually paid off and in Pasadena, California, where he had a beautiful studio, his first real recognition came. From then on, he painted with greater and greater facility and appreciation of nature around him.

His painting led Michael Malloy up the coast to Alaska, down to Monterey to paint cypress, and many points in between. Soon, however, his preference became desert subjects and his canvases reflected the glories of the Navajo country, the Grand Canyon

and other outstanding sections of the desert.

The war interrupted his painting for a while. He served in the Coast Guard with the rank of lieutenant, but with the war over, he came back to his real love.

Trips to the desert to sketch finally interested him in Twentynine Palms, and it is there today that he lives with his wife Helen. Now, nearly all of Michael's paintings are desert scenes. He has learned to love every little part of it. His appreciation of the tiny plants around him is shown in the painstaking detail to be found in the foreground and mid-distance of a Malloy painting.

Where the Malloys live, on the top of a high hill in the desert, Michael watches every bush and tiny plant that is about to come into blossom. He has made friends with the animals too, and puts water and food out nightly for his little neighbors. There are several kangaroo rats that have become very tame and one, called "Hopalong," eats out of Michael's hand. A kit fox is almost a nightly visitor and at times the coyotes come into the yard for a drink or a snack.

Malloy paintings now hang in most of the better western galleries, featuring desert landscapes. They show a sincerity and attention to detail that appeals to many, and are to be found on the walls of fine homes in cities and the desert itself. If Michael's old trainer could see him now, wearing his beret and flowing tie to the opening of an art gallery or a one-man show, he would agree that his friend at last had found a way of life that is "mighty dignified."

DEATH VALLEY 49ERS ELECT ARDIS WALKER PRESIDENT

TRONA—Ardis M. Walker, Kern County supervisor and descendent of gold rush pioneers, was elected president of Death Valley 49ers, Inc., at the annual meeting in Trona, California. Walker, who lives in Kernville, is the author of several books on California. His family discovered Yosemite Valley and led the first expedition across the Sierra.

Other officers elected are John Anson Ford of Hollywood, vice-president; Arthur W. Walker of San Bernardino, treasurer, and Joe Micciche of Los Angeles, secretary.

New directors include John Hilton of Twentynine Palms, Lt. Gov. Cliff Jones of Nevada, Harry E. Lee of Lone Pine, Seth Droubay of Inyo County, R. R. Henderson of Ontario, Mrs. George Palmer Putnam of Death Valley, Dave Olmsted of Long Beach and Floyd B. Evans of Pasadena.

Re-elected to the board of directors

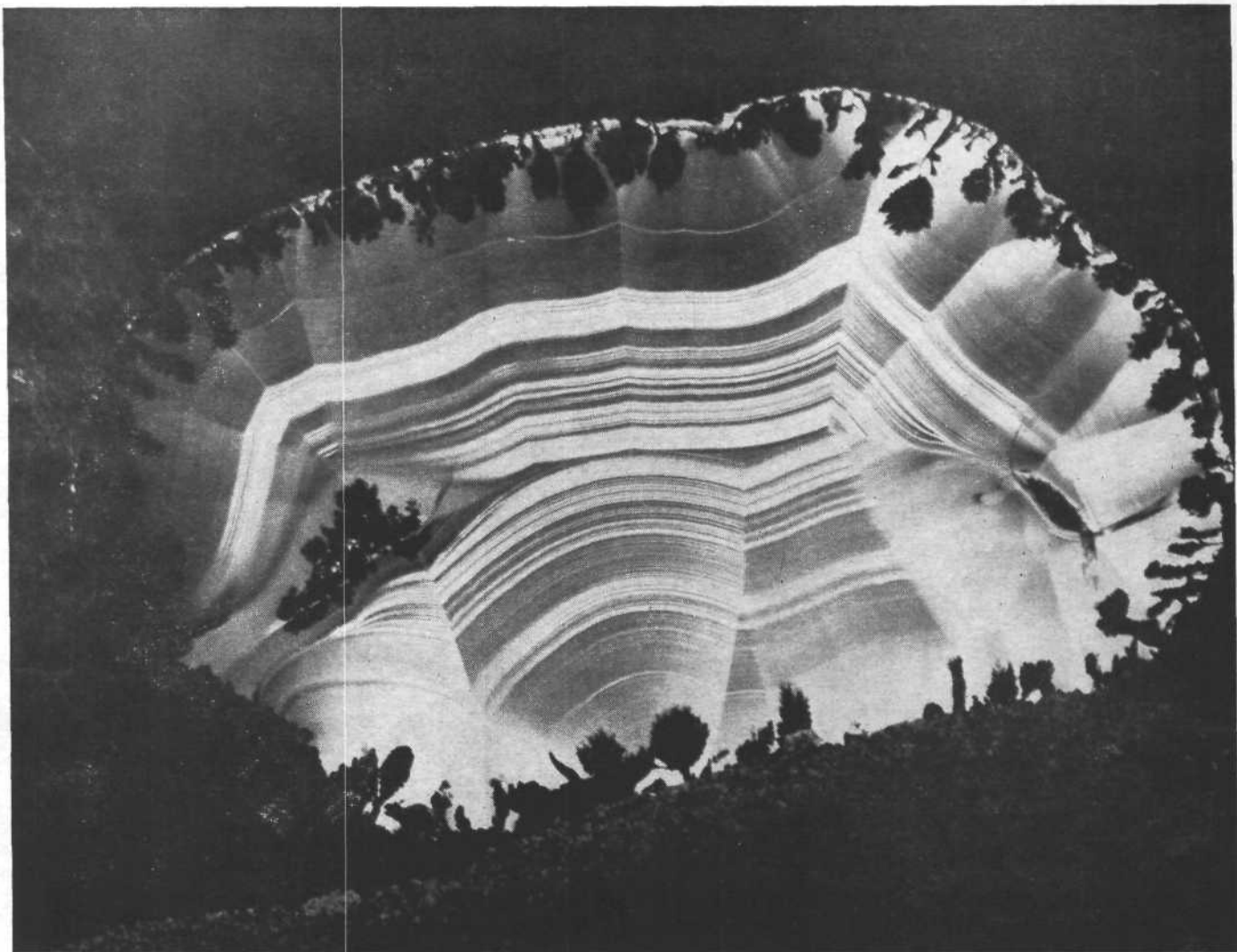
are George Sturtevant of Trona, Capt. R. A. Gibson of Palm Springs, T. R. Goodwin and Charles A. Scholl of Death Valley, W. R. Harriman of Hemet, Randall Henderson of Palm

Desert, Paul B. Hubbard and James Nosser of Johannesburg, Sidney Smith of Glendale, Frank Latta of Bakersfield and Maury L. Sorrells of Shoshone.—*Los Angeles Times*.

Desert Quiz

Here's another lesson in the School of the Desert Rat. Questions in this list call for a wide range of knowledge, all pertaining to the Great American Desert. To make a perfect score you should know a little about desert history, mineralogy, geography, botany, and the Indian tribesmen. But if you do not already know the answers, this is a good time to learn them. A score of 12 to 14 is fair, 15 to 17 is good, 18 or over is excellent. The answers are on page 26.

- 1—Coolest clothing to wear in the desert's summer heat is—Green..... White..... Olive Drab..... Yellow.....
- 2—Highest mountain visible from the desert is in—Arizona..... New Mexico..... Utah..... California.....
- 3—Author of the famous stories about the frog that never learned to swim was—Isaac Walton..... Frank Dobie..... Harry Oliver..... Dick Wick Hall.....
- 4—Ancestral home of the Chemehuevi Indians was—Along the Colorado River..... In the Cocopah Mountains..... In Salt River Valley..... On the shores of Pyramid Lake.....
- 5—Palm Springs is at the base of—Mt. Whitney..... Catalina Mountains..... Wasatch Range..... San Jacinto Mountains.....
- 6—The stream which Major Powell called the Dirty Devil River is now known as—Fremont Creek..... Bright Angel Creek..... Virgin River..... Little Colorado River.....
- 7—The squash blossom hair dress is worn by Hopi Indian girls—Only at the annual snake dance..... When they are married..... As evidence they are ready to marry..... When in mourning.....
- 8—The state which lies northwest of the famous "Four Corners" is—Utah..... Colorado..... New Mexico..... Arizona.....
- 9—Going by the most direct paved road from Indio, California, to Wickenburg, Arizona, you would cross the Colorado River at—Yuma..... Parker..... Topoc..... Ehrenberg.....
- 10—The postoffice of Tonalea, Arizona, is sometimes known as—Red Lake..... Inscription House..... Kaibito..... Dinnehotso.....
- 11—Among the native trees of the Southwest the best for shade purposes is the—Palm..... Joshua Tree..... Smoke tree..... Mesquite.....
- 12—Obsidian is — Metamorphic rock..... Igneous rock..... Sedimentary rock..... Conglomerate.....
- 13—Hank Monk was a famous—Bandit..... Mountain Man..... Stage driver..... Indian scout.....
- 14—To enter scenic Oak Creek Canyon from the north you would leave Highway 66 at—Winslow..... Flagstaff..... Williams..... Ashfork.....
- 15—In firing their pottery the pueblo women of the Southwest prefer to use—Dry aspen wood..... Cedar wood..... Coal..... Dry manure.....
- 16—Mature fruit of the most common species of prickly pear cactus is—Green..... Red..... Indigo..... Lemon yellow.....
- 17—Carlsbad Caverns are in—Arizona..... Texas..... Colorado..... New Mexico.....
- 18—If you started down the Colorado River from Blythe in a boat, the first dam you would encounter would be—Davis dam..... Laguna dam..... Imperial dam..... Coolidge dam.....
- 19—The Grand Canyon book titled *Listen, Bright Angel*, was written by—George Wharton James..... Edwin Corle..... Oren Arnold..... W. A. Chalfant.....
- 20—Only one of the following towns was never the capital of Arizona—Yuma..... Prescott..... Tucson..... Phoenix.....



This photograph of a polished section of moss agate was taken by E. J. Sexton of Helena, Montana, and exhibited in the Chicago Museum of Natural History.

There's Beauty Inside Those Ancient Pebbles

For many years the ancient terraces of smooth-rounded beach pebbles found on the mesas and slopes bordering both sides of the lower Colorado River have been yielding prize specimens to rock collectors. These pebbles include many kinds of fossil material, petrified wood, jasper, chalcedony, agate and moss agate—but the beauty of these stones is seldom revealed on their surfaces, and it is only through trial and error in the lapidary that the collector eventually learns to distinguish the good cutting material from the ordinary rock. Here is the story of a field which has an inexhaustible supply of cabochon material close by a paved highway.

By HAROLD WEIGHT
Map by Norton Allen

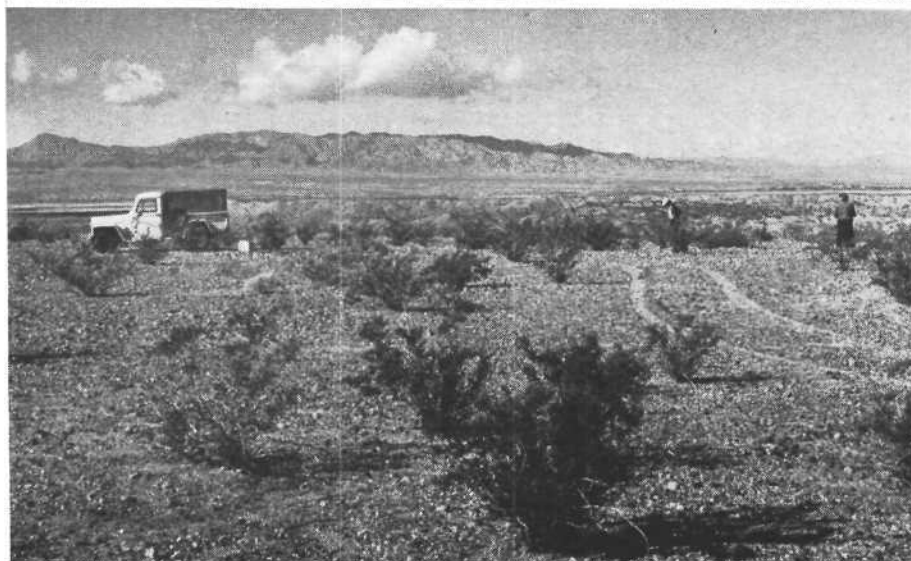
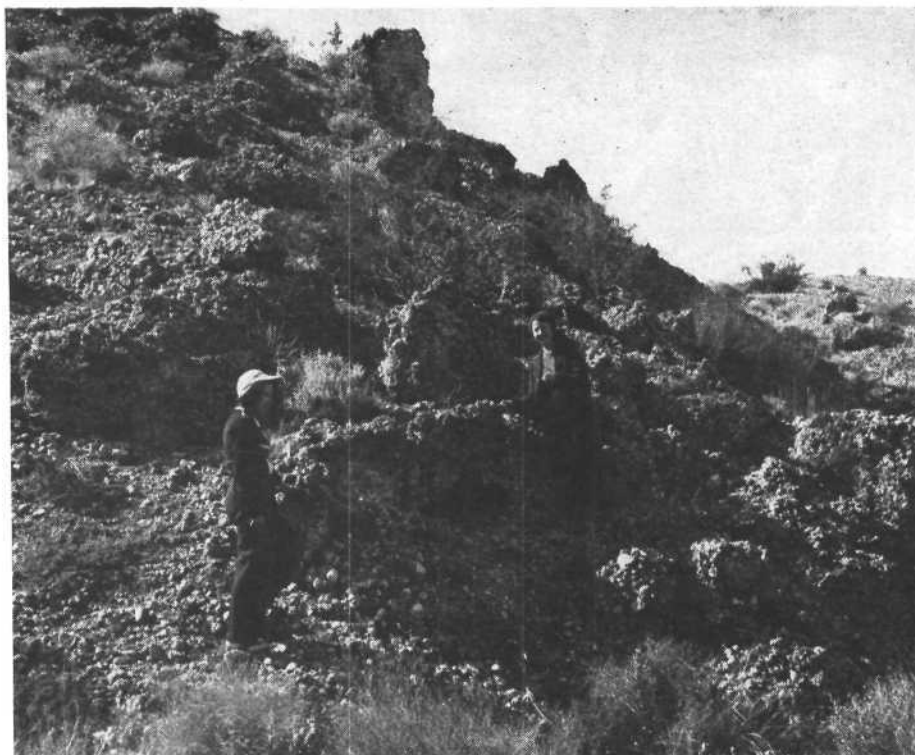
MY SISTER, Viola, made the prize discovery on our collecting trip to the ancient beach terraces on the Arizona side of the

Colorado River opposite Needles, California.

Among the hard smooth-worn rocks that compose these terraces she picked

up a strange little phantom of Time's kindergarten days—the skeletal impression of a trilobite, a relic that dates back millions of years.

A fascinating story of geological history was disclosed in that palm-sized pebble—a story with many missing chapters. We can only guess that this fragile little crustacean—one of a great and varied family which swarmed in the oceans of all the Paleozoic ages—died and settled to the bottom, to be buried in clay and calcium carbonate and sea slime. There the little beast itself vanished, but its external skeleton survived, though perhaps altered to limestone, until the clay packed around it became claystone and until percolat-



Above—Hill of pebble conglomerate located just west of Highway 66, seven miles from Topock. Harold Weight photo.

Below—Looking across one of the pebble terraces between Topock and Oatman. This field is just west of Highway 66 and is easily accessible to cars. Harold Weight photo.

ing silica-impregnated waters made the claystone hard, enduring rock.

Somehow that rock was brought to the surface again. Perhaps earth movements forced it up. Perhaps, somewhere in the Grand Canyon, the Colorado cut its way down to that stratum, broke off that special piece and rolled and washed it to our hands, a miraculous token of an age we cannot even comprehend.

We found other prize rocks among the pebbles that day: other fossil material, petrified wood of various kinds of replacement including some that will

cut and polish, bright bits of jasper and colorful pieces of moss agate, agate and chalcedony. But the prize, so far as I was concerned, was the trilobite. It is for such things as this—the unexpected wonders which may turn up—that Lucile and I love to prospect the Colorado River pebble terraces, wherever we may find them, from the Sidewinder Hills near Yuma to the banks of the Grand in Colorado.

The collecting areas between Topock and Oatman lie on either side of present U. S. Highway 66; it is possible to park your car beside the high-

way, walk a few feet and hunt out choice specimens, fine cutting material. But the very fact that it is alongside the highway delayed our exploration for a long time. We were always coming or going to or from somewhere—and in a hurry!

Then last fall my mother and sister moved to Needles, where my sister is teaching in the high school. The easily accessible pebble terraces lie almost directly across the Colorado from Needles, and we knew that with a headquarters so close, we were going to be able to enjoy some rock hunting.

The first hunt took place after the Thanksgiving turkey had settled sufficiently, though it looked for a while as though we would have to take a rain check. There was a heavy fall during the night and dark clouds concealed the Black Mountains across the river, and came down almost to the river itself. But when the clouds lifted and the sun shafted through, we set out.

By air line, it is only a few miles from Needles to the Arizona pebble terraces—but it is necessary to cross the Colorado River, and the only bridge is at Topock, requiring a U-shaped drive of more than 20 miles to reach the heart of the rock area. It is a beautiful drive, with fine views of the Needles, the peaks for which the California town was named, but which lie on the Arizona side below Topock.

A new highway now under construction, called the Yucca cut-off, will make it unnecessary for travelers to go over the Black Mountains, via Sitgreaves Pass and the steep, twisting Oatman-Gold Road grade. The cut-off was to have been completed in 1952, but Editor Sylvan Williams of Needles' *Desert Star* recently reported that it may not be finished this year.

Tourists who remember the narrow, steep, twisting loops above Gold Road in the summer heat, and especially those who have dragged trailers over the hump, will be delighted with the Yucca cut-off. But it is bad news to Oatman and Gold Road. Since the regulations of World War II, inflation and present federal policy of pegging gold at the pre-war level, tourist traffic has helped keep the two communities alive.

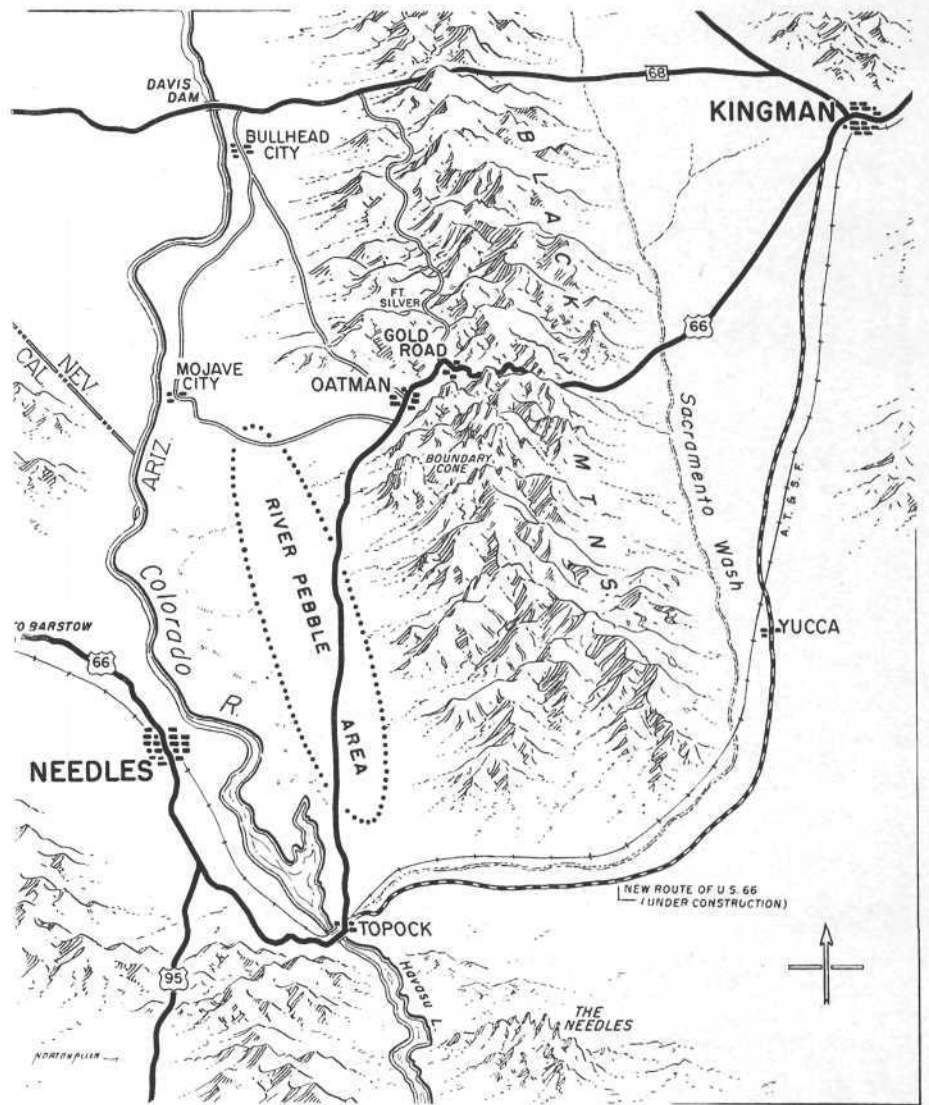
Oatman lies about 25 miles north and east of Topock, on present 66, and Gold Road a little farther. Mining started early in this vicinity, shortly after General J. H. Carleton and his Fifth California Volunteers garrisoned Camp Mohave in 1862. In those days it was the practice of some experienced miners to join the Army in order to prospect new and dangerous territory

under the protection of their fellow troopers.

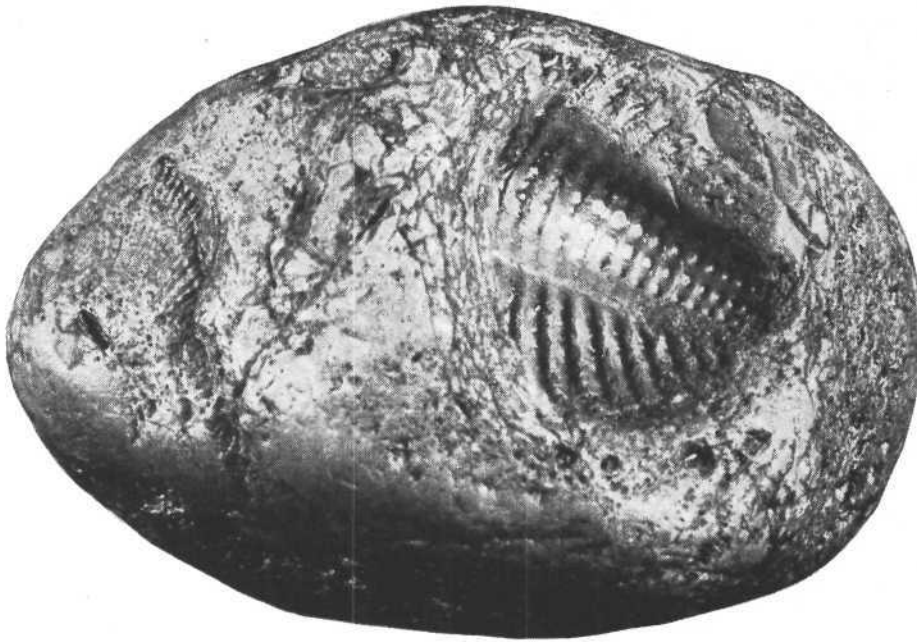
California miners with Carleton's forces soon found good prospects on Silver Creek, about four miles north of present Oatman, and beside the waterholes there they established the first settlement in the area. F. L. Ransome, investigating the geology of the district for the Geological Survey in 1923 found the walls of 12 stone cabins still standing. When I first visited Silver Creek in 1946, I could locate only three. When this settlement was founded, it was in Dona Ana County, Territory of New Mexico. The Territory of Arizona was not created until 1864.

The gold rush into the area started in 1863 or 1864, after John Moss located the Moss vein, north of Silver Creek. According to some stories, a friendly Indian led him to the spot where he found reddish-brown quartz covered with flakes, incrustations and beads of gold up to the size of a hazelnut. It is said that he took \$240,000 from a hole ten feet square and ten feet deep on the outcropping. Some of the ore, sent to San Francisco, reportedly netted \$57,000 a ton.

In the early days the ore there had to be rich. Some was worked in little stamp mills by the Colorado. But most of it was packed by burro to the river, shipped by river steamer to Puerta Isabel near the mouth of the Colorado, and thence to San Francisco. From there it might go to Wales for treatment. Supplies from San Francisco to Camp Mohave, by river boat, cost



Mill of the Tom Reed mine at Oatman, Arizona (1946 photo) where Colorado River beach pebbles first were tested in a ball mill. Harold Weight photo.



This impression of the skeleton of a trilobite has been preserved in almost imperishable stone millions of years. Actual pebble size is 2¾ by 1½ inches. Harold Weight photo.

\$77.50 a ton in 1868. Ore going back on the empty boats was carried for \$15 a ton.

Mining continued through the 1870s, '80s, and '90s, but the first big producer which created Oatman was the Tom Reed. This ledge, then called the Blue Ridge, was struck about 1901. The community which grew up around it also was called Blue Ridge. Its name was changed to Oatman on January 1, 1909, in memory of Olive Oatman who, with her younger sister, was held captive in the vicinity by the Mohave Indians after the famous Oatman massacre of 1851. The Indian village where they were held reportedly was on the site of the Tom Reed pumping station.

In 1910, a bar of bullion weighing 364½ ounces and valued at \$75,000 represented one month's production at the Tom Reed. By 1931 it had produced \$13,053,400 and it continued as a leading Arizona mine almost until its closing in 1939. The United Eastern, discovered in 1915, brought the boom to Oatman all over again. It closed in 1924 with a gross of over \$14,000,000. The Gold Road, discovered by Joe Jeneres in 1902, produced more than \$6,000,000 before it closed in 1931. It came to life when gold was upped to \$35 an ounce and reportedly produced even more before it was forced to shut down in World War II.

Since the war, the camps in this district have been able to show but little activity and none of the big mines has reopened. In the past few months there has been a new exodus from Oat-

man. It is partly due to the coming completion of the highway cut-off, and partly to the fact that the operators of the Tom Reed are auctioning off the mine equipment, killing hopes of early reactivation there. But I doubt if Oatman will become a ghost. Too many people like the little camp in its spectacular mountain setting for it to be completely abandoned. And there always is the hope that a change in United States economic conditions will permit a revival of Western mining.

After leaving Topock, where we zeroed the speedometer, we made our first stop to investigate the river pebbles on the west side of the highway at three miles; we stopped again at four miles, on the east, and at a little less than six miles and at seven miles on the west. There are many other spots where the river terraces are exposed or where they can be reached. At the last mentioned mileage there is the remnant of an old road branching back to the southwest which will permit the rockhunter to get some distance off the highway in dry weather, and close to a ridge where the exposed pebbles are still cemented in their conglomerate. But in wet weather, when we tried it, it proved to be the most slippery surface imaginable. Great gobs of the red-brown clay collected on our shoes, and it took the four-wheel drive to enable the car to regain the highway.

We were not the first ones to show interest in the Colorado River pebbles in this area. Way back in 1858, J. S. Newberry, the geologist with Lieut. J. C. Ives' Colorado River exploring ex-

pedition, had commented upon them. And his description of some found farther down the Colorado also fits those in the Mohave Valley:

"The gravel beds are made up of material of two different classes: First, angular fragments of granite, trap, porphyry, etc., brought down from the neighboring hills and forming long slopes about their bases; second, rolled and rounded pebbles of various sizes, composed of all forms of erupted rock, with silicified wood, jasper, chalcedony, and occasionally chert containing corals and crinoidal stems; the latter derived, as I subsequently ascertained, from the Carboniferous limestone many hundred miles above."

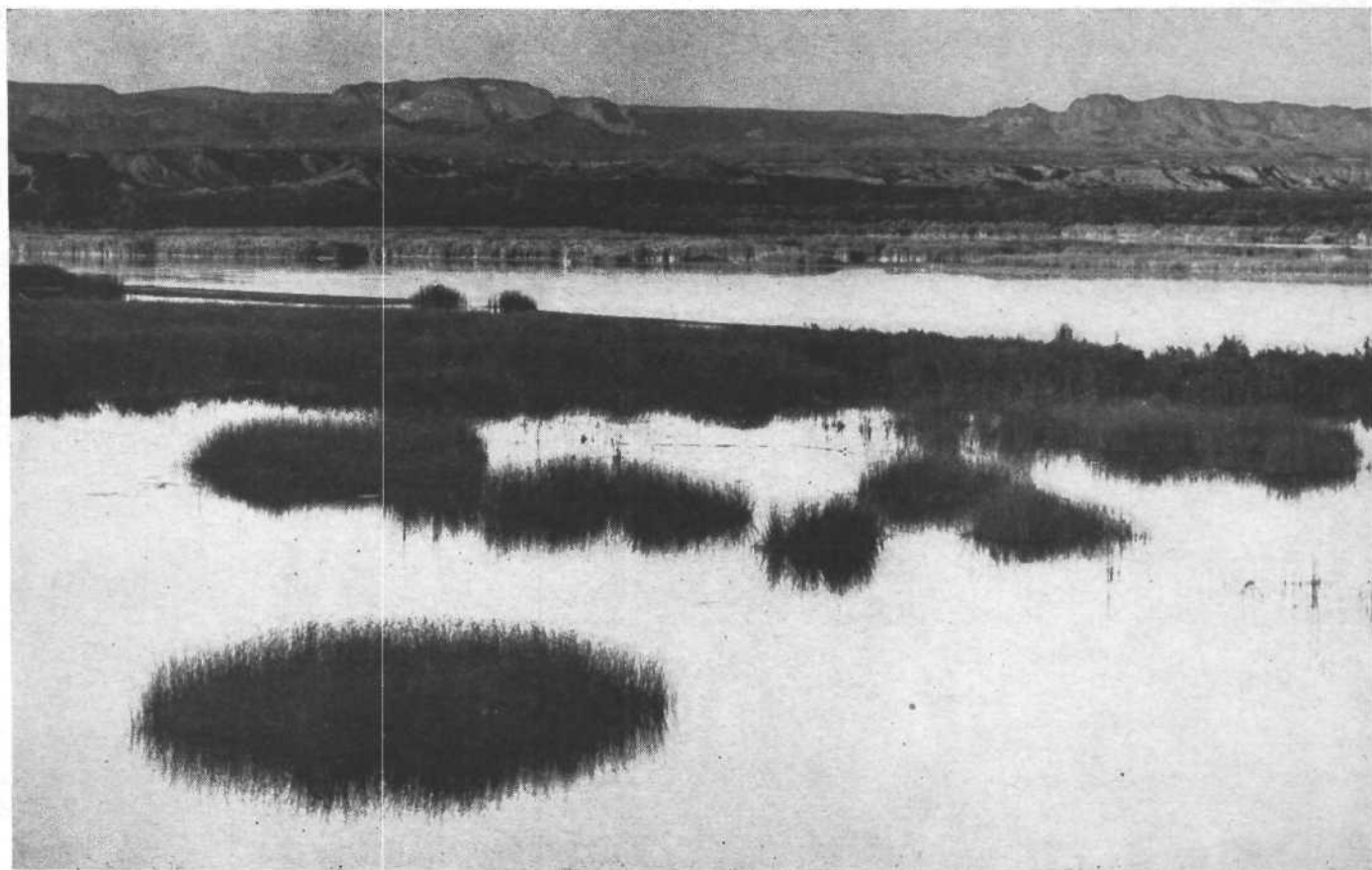
Then, early in 1910, it looked as if the pebble deposits might prove commercially valuable. At that time the mills at Oatman and Gold Road were in constant operation. Most of these reduction plants used what were known as tube mills in their processes. These were revolving metal cylinders half filled with flint pebbles and often lined with the same kind of pebbles set in cement. The tube mills were used for the fine grinding of ores, which were fed into the upper end, mixed with water.

These mills used five tons of the flint pebbles at a loading, and the pebbles were constantly wearing away. Until 1910 all of these pebbles, which were carefully selected for uniformity of size were shipped from the Scandinavian countries where, reportedly, they were collected upon the sea coasts. In April of that year Bob Zuver of Oatman and Henry Lovin, who had stores in several mining camps and was known as the "Merchant King of Mohave County," reported they had discovered flint pebbles along the Colorado, only a few miles away.

The Colorado River flints were tested at the Gold Road and Tom Reed mills and declared to be superior to the ones shipped from such a great distance at much expense. These mills reportedly let contracts for hundreds of tons of the river pebbles. "As they are found along nearly its entire length," the Salt Lake *Mining Review* declared, "the supply is sufficient for general usage throughout the country and a new industry seems assured."

So far as we have been able to determine, the new industry did not develop to any extent. Perhaps it was found that the percentage of flint pebbles of the right size was too small to make their collection possible. Or possibly the shift from pebble mills to those using metal balls or bars destroyed the market.

But if the Colorado River terraces



Looking across the Colorado River into Arizona near Topock bridge. The terraces and hills between the mountains and the river are largely composed of pebbles and pebble conglomerate carrying agate, jasper, chalcedony and fossil wood. Harold Weight photo.

did not prove a commercial bonanza, they will prove a treasure land for rockhounds, as those along other sections of the river have in the past. Beautiful cutting material can be obtained by those who are willing to hunt for it, although it will not be found in large pieces or in quantity of any particular kind. We found good rocks at each of the areas we checked, and that without going far from the pavement—and the supply is virtually inexhaustible.

Of course, there is a pebble collecting technique, just as there is a technique for collecting most materials. I think Lucile has summed it up rather well in her notes on our Thanksgiving hunt:

"Just by watching our own party I can understand how many could walk through such a pebble area and say, disappointed, 'I don't see a thing.'

"It is surprising to discover what beautiful moss and other patterns lie just under the often pitted, 'crazed' or otherwise weathered surface of a river pebble (they've had a hard time!). A good way to do this kind of collecting is just to sit down—if you wish, have a hooked stick or a little rake—and bring the rocks to you. Your eyes take time to become adjusted to the signs

of a 'collectable' rock. For the beauty of the river pebbles is disguised—and you can't expect them to introduce themselves. What looks like a rough quartz pebble at a quick glance might be a fine agate!"

Or what looks like a worthless bit of brownish chert might prove to be another ghost trilobite.

I hold that small miracle in my hands now, and as I try to imagine the steps by which it reached those hands, my mind balks as if it senses the brink of an unexplainable abyss. Yet

I feel there is some ultimate truth in this queer messenger from across the vastness of Time—if I could but comprehend it. Is it that the world is and always has been a testing place for life forms? That any species which cannot cure its internal weaknesses, defeat its external enemies and adapt itself to an environment which might change radically, will in time become no more—and perhaps even less—than a skeletal impression in a weathered pebble on a rock midden beside a desert river.

Ute Indians Start Credit Program

"You can't expect anybody to give you a loan unless you are doing something which will enable you to pay it back." These words of an old Ute tribal leader express his people's attitude toward the new million-dollar Ute credit plan recently put into operation.

The Utes, by collective action, have invested \$1,000,000 in a credit program for use of their members who wish to finance business undertakings.

Indian Agency officials emphasize that the fund is not a private till for Utes who wish to draw money for no special purpose. Money invested in it belongs to the Ute tribe, and is under

the custody of officials who are responsible for lending it to individuals under certain rules and regulations.

Because of the trust status of the Indians' property, and the misguided belief that the Indians are wards of the government with no legal responsibility for their actions, it often is difficult for them to obtain credit through ordinary channels.

Interest rate on loans is established at four percent, the rate at which the money would otherwise draw interest with the U. S. Treasury. One exception is educational loans, which bear the old interest rate of three percent. —*Vernal Express*.

Hopi Girl



By PHYLLIS W. HEALD

This true story was one of the prize-winning manuscripts in Desert Magazine's "Life on the Desert" contest in 1951.

MET HER in Flagstaff last summer during the Indian Pow-wow. She was not attending the Pow-wow, she was taking an English course at the college there. But it was an appropriate time to meet her as she is a full blooded Hopi Indian.

I shall call her "Mary" in this story because somehow, in the quiet beauty of her face; the deep fathomless sorrow in her eyes; the soft, appealing quality of her voice which plays upon the English language like a flute; and her calm, ageless dignity, she is a modern Madonna—symbol of a new life for the American Indian; a new outlook; a new place in their country's history.

Mary is not young, possibly 40, and she teaches the Hopi children of her native village. She told me the story of her life. It is not exciting in the modern sense of the word, but it is filled with an inner struggle to learn, to understand, to help.

As a young girl she left her home to go out into the Christian world and get an education so as to try and comprehend the strange and fantastic ideas, the good and evil, the white man was teaching her people. She had heard Indian children speak disrespectfully to their elders, forgetting their rearing, their gods, their beliefs, as the white man's mode of thinking filtered into, and confused, their own thoughts. And worst of all, she had seen the lore, the legends, the history, the very essence of Indian life fading into oblivion through indifference and the tendency of youth to forget the past and think only of the future.

No wonder Mary's eyes were sad as she told me these things!

"So I went out into the world," she continued gently. "I gave up my birthright to try and understand what was happening to my people and find a way to help them. My mother never completely forgave me. She is a very, very old woman now and in her heart and head are stored wonderful Indian stories, prophecies and legends that will die with her generation, but she will not tell them to me for she is convinced I am not pure enough to know them. I cannot make her understand that I want to preserve them, to write them down so they won't be forgotten." She was silent for a second then continued, "In another generation the Indian may not even know his own language. The youngsters are bored with the idea of sitting at their elder's knee and learning history by word of mouth."

Mary explained that she went to a denominational school and college in Los Angeles. She studied Christianity with all the intensity that her eager young mind could absorb.

"But I had to give it up," she admitted ruefully. "I could find no way to connect the teachings of Christ with modern civilization. Christianity is a beautiful concept, but the Christians of today have no conception of it. So I returned to my people, not to bring Christianity to them but to help try and preserve the richness and beauty of our own culture."

It is ironical that in Mary's effort to help her race she has somewhat lost face with them. So many young Indians have gone out into the white man's world and,

if they have come back at all, they have returned as strangers. Hot dogs, juke boxes and automobiles have altered their standards of living to such a degree that they never can be satisfied again with such simple food as maize and meal, or Indian chants and horse-drawn wagons.

It is true that Mary came back changed also. No one with intelligence and imagination can rub shoulders with a great civilization and not see some good in it, not gain some benefits and not show the result of such contacts. But when Mary came back the Hopis could not distinguish the wheat from the chaff, to them she was just another Indian girl who had deserted her people, her family, her friends. That she returned was not important—she would always be different. She would always be "not quite all Indian" ever again.

And the wonder of it is Mary understands this viewpoint. She is sympathetic to it but she is realistic enough to know their thinking can't be changed. So she does not waste her time trying to overcome the handicap and get completely back into their good graces.

Between her arduous tasks of teaching and helping with all community problems, Mary is writing. Charming true stories, told mostly for children, for Mary is convinced that if the young people of two races can learn to understand and respect each other, the others follow suit. So her Indian tales are of the Rain Gods, of seed planting time, of family love, of an Indian child's thoughts. Thus with the rare combination of an ability to tell her story in English yet retain the authentic Indian flavor, Mary is doing something beautiful and worthwhile.

We sat together that evening in Flagstaff and listened to Miss Erna Fergusson give a stimulating talk on "Writing of the Southwest." One statement of Miss Fergusson's was especially new and stimulating, at least to me. She said, "The great novel of the Southwest has not been written as yet and it is very possible that it will be done by an Indian."

As Miss Fergusson spoke I could visualize a whole new concept of the West. Its greatness and its glory seen through the eyes of its native people and told with the wisdom of their inherent understanding.

After the lecture I said to Mary. "There's your life work, Mary."

But Mary shook her head. "No. That is not for me to do. Possibly its author has been born but if so he is a very little boy as yet. It will take another generation at least, to prepare the Indian mind for such a task. The blending of the two civilizations must be perfect, and the understanding of both ways of life complete."

"But you have that!" I exclaimed enthusiastically. "That's what's so wonderful!"

"No. I am too much Indian underneath and too much pale face on the surface. The ingredients are here," and she touched her heart, "but the blend is not quite right." And for once her eyes lighted with true happiness as she added. "But Miss Fergusson is correct. The story must be told, and some day an Indian will tell it."

When White Hat Returned to the Land of the Witch Woman

Faith in their ancient customs and traditions still runs strong among the Navajo Indians—and woe be to the white man who trespasses too far into the strange world of tribal religion. Here is one of the most amazing stories ever to come out of the Navajo country—written by a man who spent many years among these Indians as archeologist and Indian Service employe.

By RICHARD VAN VALKENBURGH

AFTER A month's study of ancient Indian burials in the wild rincons of the Cañon Blanco in northwestern New Mexico, Dr. John P. Harrington of the Smithsonian Institution and I were glad to shake the cave dust off our clothing and head for the comforts of home at Fort Defiance, Arizona.

Little did we suspect as we traveled across the Navajo reservation that we were heading into one of the most unusual adventures that we were to experience in our many years with the Indian tribes of the Southwest. When it was all over, we agreed with Trader Mike Kirk's statement, "Anything can happen in the Navajo country."

This primitive drawing, made soon after White Hat's funeral, is the work of Ayoónalnezhi, the Very Tall Chanter. The owl, omen of bad luck, was included in the picture and the symbol in the lower right corner is the Hadjinah, through which all Navajo spirits pass downward into the Underworld. The Navajo do not permit photographs of a burial.





For White Hat's last resting place Benjo, the elder son, selected a rock crevice hidden in a small clearing in the pines of Nazlini Canyon in northeastern Arizona.

When we reached our apartment, where warm baths and clean clothes were awaiting us, we found visitors there. Squatting on the floor, with their blankets wrapped around their heads as a gesture of extreme grief, was the family of White Hat, an old medicine man from Fluted Rock on the Defiance Plateau.

It did not take long for Benny, one of the Indians, to break the bad news: "Doyachonda! T'is bad hastin. Last summer, while perched on the limb of a tree struck by lightning, *Nasjaa*, the owl, hooted four times at White

Hat. When he spoke of this to Bakaih, the chanter said that this was an omen of bad luck—or even death.

"In the time of the 'Small Winds' Bakaih's words began to ride with White Hat. *Chush*, the bear, got tired of eating Chee Dodge's sheep up on Sonsola, and came down and started on our flocks. He killed many before he was shot by the government stockman from Fort Defiance.

"When snow came, *Telli*, the burro, slipped on the ice near Bat Trail and gave old uncle a bad fall. Soon his back was full of rough edged flint

knives. Benjo, the elder son, called for Ayoónalnezhi, the Very Tall Chanter from Woodrat Spring.

"After looking at the stars, Ayoónalnezhi knew that demons were causing the trouble in White Hat's back. Benjo sent for Hastin Dijoli, the Round Man from Sunrise Springs, to hold the Devil Driving ceremony.

"For four days and nights Hastin Dijoli sang over White Hat. Using powerful songs and blackening medicine he worked hard to drive out the demons. Ayoónalnezhi helped and friends came from all over the mountain. But the medicine was not strong enough, and old uncle got worse.

"Hoping that the white doctors might help with their kind of medicine, Benjo got his papa on a wagon and came down off the mountain. They reached here yesterday. The White doctors looked at old uncle. They shook their heads and said that he was so sick that they would have to cut him open."

As White Hat's folks were old friends, and had given me, as well as my guests, including Randall Henderson of *Desert Magazine*, the hospitality of their hogans, we made them as comfortable as possible. While Ruth, my wife, prepared supper, John and I went over to check with the hospital.

It was the old story of what medical men have faced for many years on the Navajo reservation. When the medicine men had given up all hope, the patient had been sent to the hospital. The diagnosis was a ruptured kidney, and White Hat's only chance for life was an operation.

Next morning White Hat went on the operating table. The surgeons did everything they could. But — before the operation was over, the spirit of the old Navajo had left this world, and had started downward toward the Navajo Land of the Dead—into the realm of the Witch Woman.

With this grim turn of events I knew that we were in for an ordeal. For with their great horror of handling the dead the Navajo pass off their undertaking jobs to their White brothers. From the beginning, this has been one of the services given the Navajo by understanding government employees, clergymen and traders.

Benjo immediately designated me to act as *yó iila'i*, or chief mourner. It was his wish that his father be removed from Fort Defiance and buried according to old Navajo custom. Never having witnessed a primitive Navajo burial John readily agreed to give his assistance.

Our first chore was to go down to Bill Stagg's trading post and buy White Hat a complete outfit of new clothing.

At noon John and I went over to

the hospital. Being assured by the nurse in charge that White Hat was ready for burial we went into the morgue. On the table there lay a plain coffin made of pine. The lid was nailed down, and over it was tacked a strip of purple bunting.

When we carried the coffin out to my coupe I commented, "John—this coffin seems very light. White Hat used to be a heavy man. He must have lost a lot of weight since I saw him last winter helping out at a Night Chant near the Sawmill."

The funeral procession formed when we started to wind through the red and buff streaked walls of Canyon Bonito. John and Dot Keur, anthropologists from New York City, followed in their car. Behind them came two pickups spilling over with White Hat's kinsmen from Fort Defiance and the Rio Puerco.

Slowly the cortege bumped upward over the Chinlé Trail finally to reach the pine forest that blankets the Defiance Plateau. Some miles beyond the rusty-black pinnacles of Fluted Rock, Benjo stepped out and signaled us off the main trail. Following a dim track patterned by alternate patches of light and shadow we traveled toward the head of Nazlini Canyon.

For his father's grave Benjo had selected a small clearing that sloped off through the pines into the sunlit cliffs of Nazlini Canyon. I thought as I looked at the place, "No man, whatever his color or position in life, could ask for a more beautiful resting place than this . . ."

Nearby, a pretty sorrel pony, fully bridled and saddled, was nibbling on the grass. It saddened me to realize that Benjo was following old Navajo custom to the letter. His father's favorite pony was to be killed over the grave so that he might accompany his master into the Underworld.

While the wind of summer played White Hat's requiem through the pines I remembered what my friend Ayoónal-nezhi, one of the greatest of Navajo philosophers, had said of the Navajo belief of the hereafter. Holding steadfast to the traditions of his forefathers, the Navajo's hereafter is a fitting extension of his life on this earth.

"In every living being there are two elements—the material part, or body-shell, and the spirit, or breath of life. When the breath of life passes from the body-shell through the lips and whorls of the hands and feet, that which is known as death, comes. In time, the flesh and bones return to Mother Earth.

"The *Chindi*, or Evil Spirits of the Dead, come when the breath of life has left the body-shell. They eternally stay with the remains to harass those



Several months before his death, White Hat and his wife consented to pose for this picture beside their winter hogan on the Defiance Plateau in northern Arizona. The baby is a grandchild.

who come to steal the grave offerings, or take body parts for witch's medicine. Good Navajos take the long way around to avoid a grave.

"It requires four days for the breath of life to make the journey down through *Hadjinah*, or the Place of Emergence into the Underworld. Once there, it joins the spirits of those who have passed down. And in this World, where the Navajo were created by First Man and Woman, everyone takes part in the rituals conducted by the *Digin Dine'eh*, or Divine People."

With these words running through my mind I helped John as he reverently lifted the coffin from the car. Some distance away a crowd of Navajos watched. Just before we reached the crevice, which was to be the grave, Benjo stopped us with: "I'd like to see my papa once more. I want to be sure he's dressed good, and has on his best turquoise beads."

While I did not relish opening the coffin, I got a screwdriver from the car and started to pry off the lid. When it loosened I motioned for Benjo to come closer. He watched fearfully as I slowly pried up the creaking lid. Then—John and I got the shock of our lives. The coffin was empty!

We stood there dumbfounded while the Navajo pulled their blankets around their heads muttering dire threats against the *Bilakana* tricksters who would do such a thing as this. With the tension as tight as a drawn bow-string I knew I must find the answer to this dilemma very quickly.

Motioning for John to sit tight I jumped into my car and tore off through the forest toward the Fluted Rock Fire Tower. After reaching the phone I stirred up the doctor in charge of the hospital. In no gentle words I told him that he'd better locate White Hat pronto—or that there could be some more funerals, and that they might not be Navajo!

White Hat's body finally was located in one of the mortuary coolers. In a short time he was in another coffin and really on his way up the mountain. Once they were sure that he was there, the Navajo quieted down. Then—just as the sun sank below the silver and turquoise rims of Black Mountain, we buried our old friend in the style befitting a Navajo *hathli*, or medicine man.

When the story leaked out over the Navajo grapevine there were serious repercussions. A few days after the incident Henry Chee Dodge, the tribal leader, came in for a talk. While a Navajo orderly had been given the blame, some of the tribesmen were not satisfied with the explanation that White Hat had been mislaid.

They suspected *Bilakana* skuldugery, and were making demands. Had these been met by Chee, and other tribal leaders, the Indian Office would have had something to conjure with. For—the Navajo were demanding that all of the coffins in the Fort Defiance hospital cemetery be opened to see if they had occupants!

Mines and Mining

Albuquerque, New Mexico . . .

Oil and gas lands in the San Juan Basin have brought \$4,000,000 profit to New Mexico's Jicarilla Apaches. In the last 18 months, 25 major oil companies have purchased 10-year oil and gas leases on 288,477 acres of Jicarilla lands. If any company strikes oil, the Apaches will receive a 12 percent royalty. The tribe holds 650,000 acres of land in northwestern New Mexico.—*Mining Record*.

Albuquerque, New Mexico . . .

Expected to speed up the hunt for underground minerals in the Colorado Plateau, a faster and more accurate means of detecting deposits of uranium has been developed by Atomic Energy Commission engineers. Mounted on motor vehicles, the "scintillation probe and detecting device" is lowered into test drill holes and then gradually brought to the surface. It indicates on a pen line recorder the presence of gamma rays, given off by uranium and radium.—*Tucson Daily Citizen*.

Kanab, Utah . . .

Salinas Mining and Smelting Company, which is doing extensive uranium mining in the Orderville Gulch area east of Zions Canyon, reports discovery of a number of excellent ore bodies. A company spokesman estimated the ore would contain as much as .03 percent uranium. — *Kane County Standard*.

Nevada City, California . . .

Minona Mining Company, a Minnesota corporation, has obtained title to more than 1600 feet of channel between Birchville and French Corral, 14 miles west of Nevada City. The property, 1300 acres in area, yields a rich bedrock gravel. A dragline plant is processing 2000 yards daily, and the capacity is expected to be increased to 4000 yards. Almost 20,000,000 yards of gravel are available.—*Pioche Record*.

Aztec, New Mexico . . .

Blue Peak Mining Company at Aztec, presently shipping uranium ore to the Shiprock, New Mexico, processing mill, will deliver to the nearer Anaconda Copper Company plant at Grants as soon as the \$2,500,000 structure is completed. The Anaconda mill is the eighth to be constructed in the area within the past four years. — *Aztec Independent-Review*.

Ely, Nevada . . .

Plans for developing tungsten property in White Pine County have been announced by Herman M. Cooley, Winnemucca mining operator, who is assured the location will become a prolific producer of high grade ore. Cooley has immediate plans to sink a shaft at the Blue Light Mine, on Cherry Creek approximately 50 miles north of Ely, to determine the extent of the deposit. Outcroppings indicate it carries a high tungsten value. — *Battle Mountain Scout*.

Ruth, Nevada . . .

Preparations were rushed to dewater Kennecott Copper Company's Star Pointer shaft near Ruth after flooding of Kellinske shaft broke through to submerge the nine-level pump station. Water rushed into the Kellinske from a fissure that had been opened up by blasting, and pressure forced an opening into the Star Pointer. The flooding had no effect on work at the Deep Ruth which is approximately a mile northwest of the Kellinske. — *Humboldt Star*.

Tombstone, Arizona . . .

Ghost mining towns of Gleeson and Courtland a few miles northeast of Tombstone may be revived. The old Tejon Mine at Gleeson has been leased by William Ward and associates from Steve Pryor, sole owner of the property for the last 10 years. New equipment is being moved to the copper and zinc mine, which was first developed in 1885. It was abandoned as a large producer over half a century ago.—*San Pedro Valley Times*.

Tonopah, Nevada . . .

Basic Refractories, Inc., has acquired the physical assets of Sierra Magnesite Company of Nevada, which includes a considerable number of placer claims as well as certain patented claims adjoining Basic's present property. According to H. P. Wells, Jr., president, "the new claims will improve Basic's accessibility by low cost open pit methods to ore already developed in areas which it presently leases and loans." — *Tonopah Times-Bonanza*.

Washington, D. C. . . .

Sixty uranium claims are expected to be filed by Navajos as soon as new regulations opening operations on the reservation become effective. The two new principles expected to step up

uranium development were the extension of the tribe's power to negotiate leases with non-Indian miners, and a provision allowing Indians to assign their own permits to white operators. Navajos without capital thus could acquire outside help to get into production.—*San Juan Record*.

Las Vegas, Nevada . . .

Severe storms which crippled Nevada transportation and mining facilities during January caused sharp decreases in production of copper and zinc. Copper production dropped 32 percent below the December total and 28 percent below the monthly rate, toppling the state from its national ranking of fourth in 1951 to fifth in the month of January. Zinc output was 17 percent below the 1951 monthly rate.—*Tonopah Times-Bonanza*.

Grants, New Mexico . . .

Anaconda Copper Mining Company expects to begin construction immediately on a uranium processing plant near Grants, New Mexico. The mill will handle ore from deposits on land of the Santa Fe Railroad Company and from Navajo reservation lands to the northwest. It is estimated the cost will be \$2,500,000, and that actual processing operations will begin by April, 1953.—*Aztec Independent-Review*.

Tucson, Arizona . . .

Plans for mining a large deposit of low-grade copper ore in the Catalina Mountains have been announced by officials of the newly-organized Arizona Copper Mines. The mining property, located in the Old Hat mining district, lies 20 miles north of Tucson. The total ore body is believed to contain at least 100,000,000 tons of low-grade ore, and is expected to develop into an extensive operation.—*Humboldt Star*.

Fallon, Nevada . . .

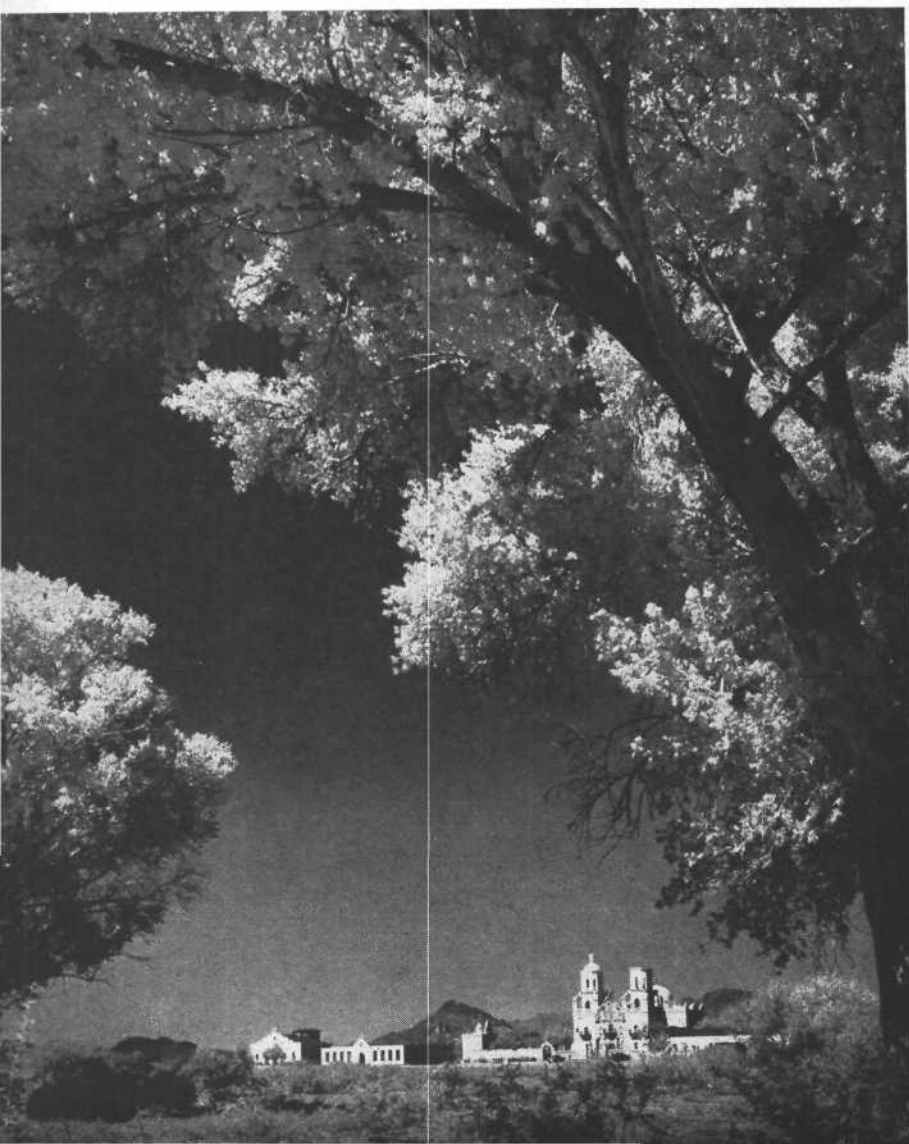
Stressing its need as a mine access road, members of Churchill County Chamber of Commerce urged federal and state highway officials to renew consideration of a highway north from Fallon to connect with Highway 40. The Kaiser-Aluminum Company, which will build a reduction mill at Fallon, is now seeking information on all known deposits of fluorspar in the area. "We understand there is an excellent deposit in Pershing County and good showings of fluorspar to the north," said Roy Durbin, chamber president, "and a shorter route than via Fernley may be needed for the ore haul." Construction of the roadway has been urged for years by Churchill and the counties to the north and south.—*Fallon Standard*.



Pictures of the Month

Indian Boys . . .

What youngster wouldn't trade his Hopalong boots for a headdress like these! The two Paiute Indian boys were photographed at Pyramid, Nevada, by Andrew Crofut of Reno, winner of first prize in Desert's February contest. The picture was taken at midday with a 4x5 speed graphic camera.



Mission . . .

This composition framing Mission San Xavier del Bac in foreground greenery, won second prize for Hal Strong of Salt Lake City. Strong used a 4x5 speed graphic, Infra Red film and K-2 filter, 1/10 second at F. 11.

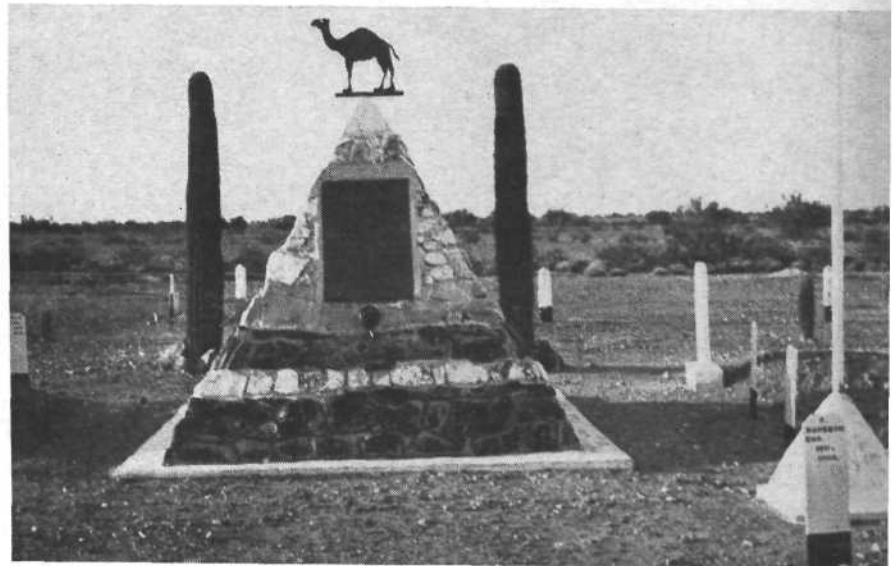
In Memory

In observance of Memorial Day this year, *Desert* is presenting an unusual photo collection of graves and tombstones which mark the burial plots of men and women who were pioneers in the desert country.

Some of these frontiersmen of an earlier generation were saints, and some were sinners. Most of them came to the desert seeking wealth by honest methods, a few were drawn to the frontier for easy money without regard for life or law. All of them passed to their just reward many years ago, and only these weathered tombstones remain as reminders of those days when life on the desert frontier was rugged and only the strong survived.



The cemetery at Calico, California. (Desert '42)

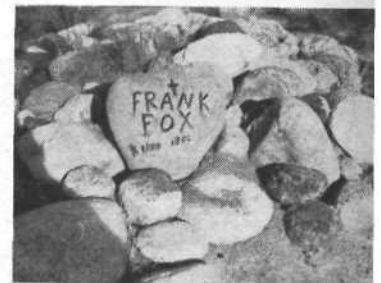
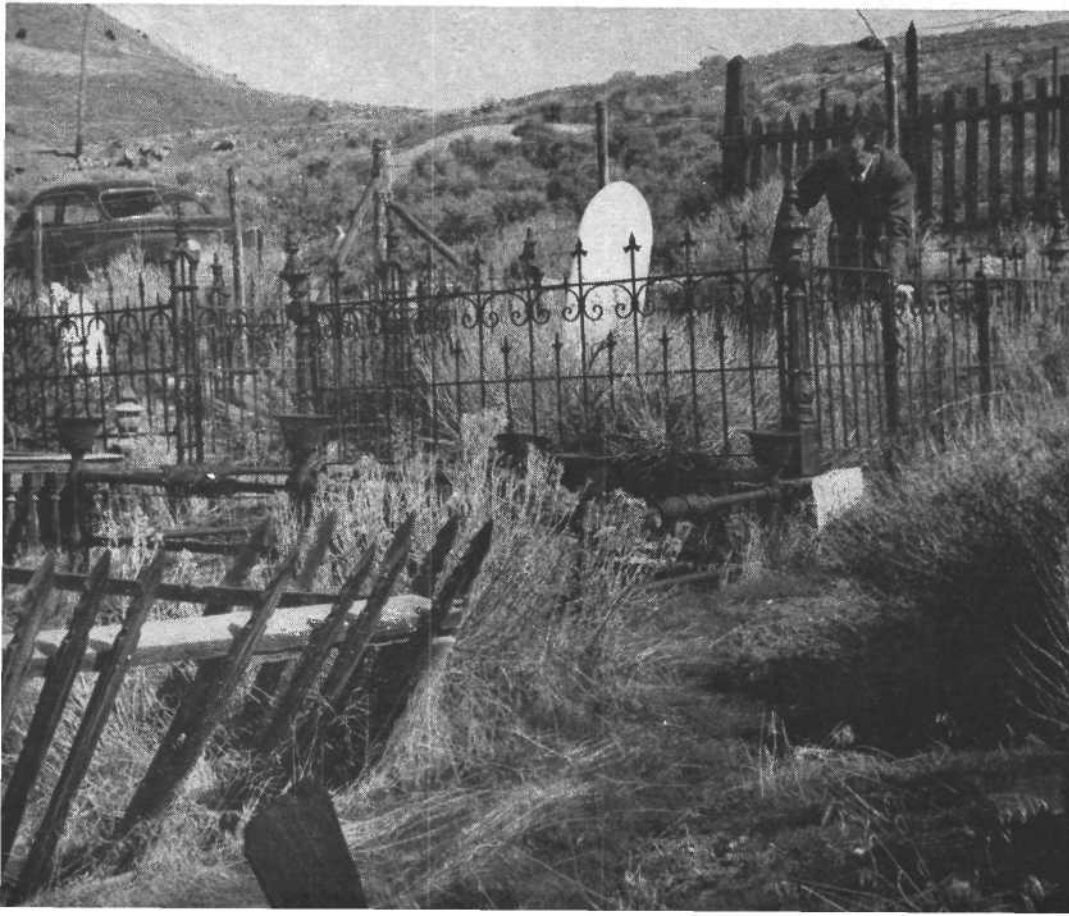


The monument which marks the grave of Hadji Ali (Hi Jolly) the camel driver—at Quartzsite, Arizona. (Desert, Mar. '45)



The graves of Shorty Harris and Jim Dayton in Death Valley. (Desert, Nov. '43)

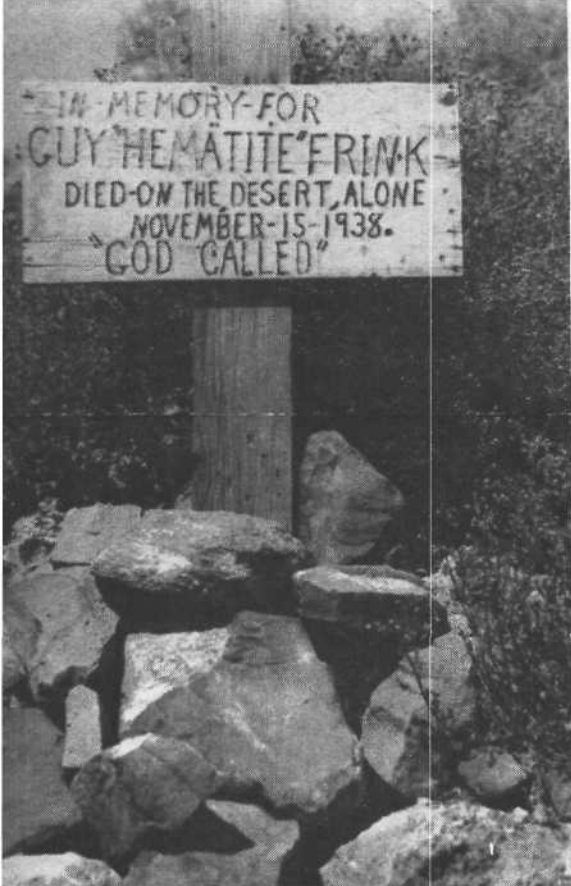
Relic of the boom town days in Virginia City, Nevada. (Desert, June '42)



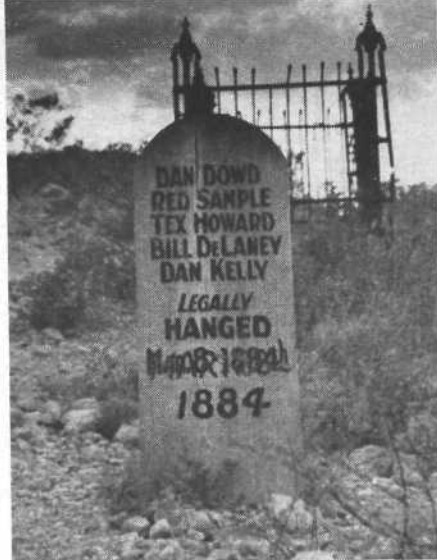
Where Frank Fox was killed — near the old Butterfield stage station at Carrizo, California. (Desert, June '40)

From the ghost town cemetery of the Hawaiian colony in Skull Valley, Utah. (Desert, May '46)





Photograph taken in the Turtle Mountains, California. (Desert, Sept. '40)



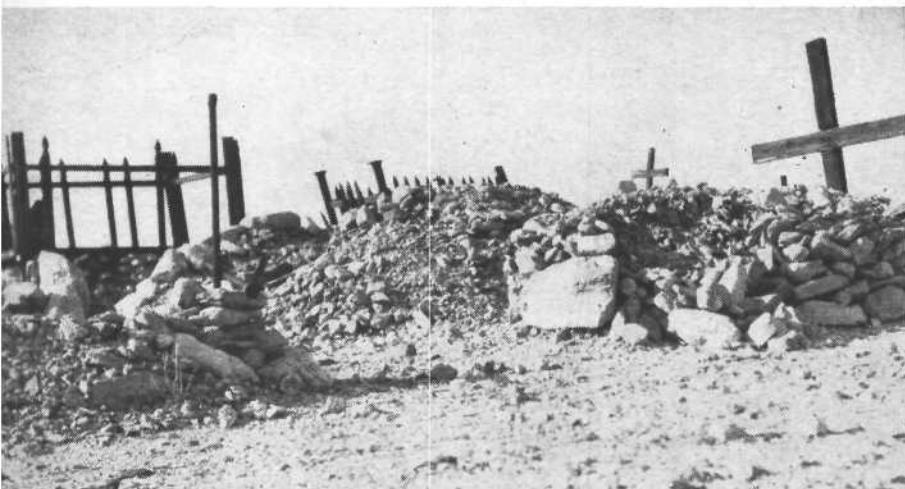
These markers in Boothill cemetery at Tombstone, Arizona, speak for themselves. (Desert, Aug. '41)



Photograph taken near Randsburg, California.



An unknown grave on the California desert. (Desert, Sept. '39)



Long abandoned cemetery at the Tumco mines—formerly Hedges—in the Cargo Mucho Mountains of California. (Desert, Feb. '49)

Where Gus Lederer and Tommy Jones—veteran prospectors of the Chuckawalla Mountains—were buried at Tule Well, California. (Desert, Jan. '45)



Letters

Sheds Light on Mystery . . .

Los Angeles, California

Desert:

I have more than a passing interest in Ada Giddings' article, "Goler's Lost Gold" (March *Desert*). Old "Slate Range Jake," mentioned as "Jack Kur-litz" (it should have been spelled "Kuhrts") was my grandfather.

I may be able to shed some light on the mystery of where Goler went after disappearing from Los Angeles. Before he left, he borrowed a clock from my grandmother, and when he returned with it four years later he said he had been in Death Valley. My grandmother never saw him again.

I still have the clock in my possession.

G. J. KUHRITS, JR.

• • •

"Crumpy" in the Traces . . .

San Bernardino, California

Desert:

Harold Mecham, editor of the San Bernardino Pioneer Society *News Bulletin*, is the son of the C. F. Mecham

Ada Giddings mentions in her story, "Goler's Lost Gold" (March *Desert*).

Harold remembers an amusing anecdote his father used to tell about "Crumpy," who Mrs. Giddings reports was one of the most successful miners in Goler Canyon.

Crumpy was said to be a very large and powerful man. One time he hitched up a wagon with two jacks—named Brigham and Jackson—and set out prospecting. He returned a week later, in the wagon traces pulling with one of the mules. Brigham had died on the trip and Crumpy filled in. Mecham related it was a most comical sight.

KATE J. KLAPP

• • •

Knows Arrowhead Art . . .

Granada Hills, California

Desert:

In the March issue of *Desert Magazine*, James L. Cooper asked for information about arrowheads. When I was 14 years old, I spent some time with the Winnebago Indians and learned the art of chipping arrowheads and making other types of tools.

Should Mr. Cooper like to try chipping a point, I would suggest he start with a high quality glass one-fourth to three-eighths of an inch thick, and cut or break it into rough triangular pieces, then chip. In this way it is possible to produce heads quite uniform in size for special displays.

I have seen heads made from colored glass bottles, and I understand some South American tribes will trade valuable hides and handiwork for bottles from which to make weapon tips. I have heard they prefer green glass to other colors, but just why I do not know.

The most difficult operation in arrowhead making is fracturing the stone so as to get chips and not chunks.

One general misconception I have found among casual artifact collectors is the belief that small arrowheads are "bird points." Plains Indians and woodland tribes who hunted buffalo and other large game often used the smaller tips, finding they penetrated better than heads.

Since leaving Wisconsin, I haven't been able to find any good arrow-chipping material, and I have grown a bit rusty at the art. I should like to find some obsidian chunks somewhere and make some arrowheads. I find it a relaxing hobby.

NAHUM G. HERSON

• • •

More Sandspike Ideas . . .

Bairail, Wyoming

Desert:

The Borrego Badlands concretions (March *Desert*) being unusual, the solution to the puzzle of their origin

most likely is also an unusual one. It seems impossible to explain them in terms of natural processes.

Should sand containing a cementing agent cover an area subject to groundwater under pressure, most any type of form might be expected to result, especially if there were decayed roots or channels in the sand for the water to follow. Ages later the top sand would blow away and leave the unusual rock forms.

Sand spikes might result if the strata were vertical.

LESLIE E. BOWSER

• • •

Rockhounds Within a Week . . .

San Gabriel, California

Desert:

Smartest thing I ever did was to pick up a December issue of your magazine.

We — my husband, our nine-year-old son and I—had just gathered our first rocks when we stopped for a sandwich at Desert Beach. That beautiful cover picture convinced us we needed your magazine.

Since then we have indeed become collectors—of a Mineralight, Fenton's *Rock Book*, Zim and Cooper's *Minerals*, a rock hammer and (with the help of Henry's *Gem Trail Journey*) about 200 pounds of rocks. The only ones we can identify as yet are geodes from Wiley's Well.

We have no acquaintances who are rock hunters or cutters, nor have we ever seen a stone cut or polished. Nevertheless, we boldly bought lapidary equipment. My! Do we trust you and Leland Quick! And are we ever amateurs!

This all took place between February 17 and 25—so you see what can happen to a normal family in just one week!

ONA FORSBERG

• • •

More Than Scrub in Inyos . . .

Julian, California

Desert:

In his article on the Cerro Gordo Mine, which appeared in the March issue, A. La Vielle Lawbaugh states: "In all the Inyos there is nothing larger than scrub growth, for they are a desert mountain range."

I covered most of the Inyos two years ago while hunting mountain lion for the Fish and Game Department. There are two kinds of pines there which grow to good size. Locally they are known as white bark pine and fox tail pine.

When I asked for information on the Inyos, I was directed to Harold Gates of Lone Pine. I found him a very reliable source of information on all the Owens Valley area.

WILLIAM DYE

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Wildflower Lovers, Unite! . . .
Barstow, California
Desert:

Now that long-awaited Spring is arriving and green plant shoots—harbingers of glorious wildflower color—are beginning to show, it is heartbreaking for us who live on and love the desert to see its life disrupted and destroyed by flocks of sheep. These animals frighten the wild birds, eat the young plants and trample to death those shoots not yet through.

Isn't there something we could do? Perhaps citizens interested in saving our wildflower fields could organize, form a group and collect dues which would comprise a fund to lease government grazing lands and preserve the beauty of our deserts.

We have a mine 18 miles north of Hinkley, California. We built 14 miles of road into this mine, and we maintain it until hot weather begins. Every week-end car after car travels across this colorful span of desert, up our little canyon (where the Joshua trees will bloom this year) and through the wildflower fields.

It is a joy to know we can share our bit of desert with so many. We would like to see it kept clean of tin cans, paper cartons and the flocks of sheep which leave nothing but dry dusty earth just ready for the next wind to blow away.

These sheepmen use our road to haul water to their flocks. They are camped just over the hill from us now.

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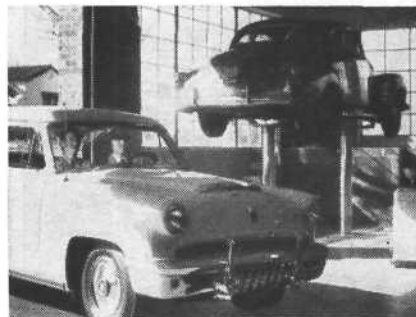


RUSH HOUR TRAFFIC JAM

HUNDREDS OF CARS ARE TIED UP IN RUSH HOUR TRAFFIC ON GRAND AVENUE IN LOS ANGELES BECAUSE DRIVER IN FOREGROUND DIDN'T FOLLOW 2 SIMPLE RULES.

TWO WAYS TO AVOID ENGINE FAILURE IN TRAFFIC

More often than not, rush hour traffic jams are caused by someone whose engine stalled because he didn't follow the two simple rules demonstrated below. If you follow these rules there will be very little chance of an untimely engine failure. And, most important, you'll be getting 100% performance from your car.



RULE NO. 1 for 100% performance: take your car to your car dealer's for frequent checkups—at least every 2,000 miles. His mechanics are factory-trained experts.



RULE NO. 2: Use the finest motor oil money can buy. Leading car manufacturers specify *heavy-duty* type oils. The finest of these is Royal Triton—the amazing purple oil.



Royal Triton is available at leading car dealers' in most areas of the United States.

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Josef Muench of Santa Barbara, California, who has supplied many of the color photographs for *Desert Magazine's* covers in recent months, was scheduled to leave April 18 for West Germany and a 4½-month visit with his aged mother whom he has not seen for 24 years. He was accompanied by his son, David.

Muench supplies photographs, both black and white and in color, for more than a score of national magazines, and is regarded as one of the outstanding field photographers in this country. His wife, Joyce, will manage the studio in his absence.

After Weldon and Phyllis Heald sold their Flying H Ranch and Phyllis no longer had chickens, cattle, pigs and rabbits to worry about, she dusted off her typewriter and started to write. "It's impossible to have an author husband and not become interested in writing," she claims.

But *what* should she write? Weldon was working on specialized material on the West—natural beauty, travel, history, geology, geography. He was covering fact; so Phyllis decided to try fiction. She started with short-short stories set against a southwestern background, then tried her hand at a piece for one of the confession magazines. It sold, and now, as she puts it, she "confesses" several times a year.

It was during a two-week visit to Arizona College in Flagstaff, to attend a Southwest Writers Conference at which Weldon was a guest artist, that Phyllis met Mary, the Hopi Indian school teacher. She was fascinated by the material, and the Life on the Desert story in this issue, "Hopi Girl," is the result.

ANSWERS TO QUIZ

Questions are on page 10

- 1—White clothing.
- 2—Mt. Whitney in California.
- 3—Dick Wick Hall.
- 4—Along the Colorado River.
- 5—San Jacinto Mountains.
- 7—As evidence they are ready to marry.
- 8—Utah.
- 9—Ehrenberg.
- 10—Red Lake.
- 11—Mesquite tree.
- 12—Igneous rock.
- 13—Stage driver.
- 14—Flagstaff.
- 15—Dry manure.
- 16—Red.
- 17—New Mexico.
- 18—Imperial dam.
- 19—Edwin Corle.
- 20—Yuma.

Inscription in Death Valley Monument Believed to Establish Pioneer Route

Discovery of the apparently authentic inscription, "1849," pecked in a rock face in Marble Canyon, very probably fixes the long-disputed route of the Savage-Pinney party through Death Valley. The discovery was made by Mrs. Ralph Emerson Welles, a visitor in Death Valley National Monument.

The Savage-Pinney party apparently split off from the other companies of the "Sand Walking" or "San Joaquin" caravan somewhere in southeast Nevada, not far from the present Utah boundary. Taking a more northerly course, they were reported to have reached Owens Lake and crossed the Sierra Nevada mountains over Walker Pass, Kern River route to the San Joaquin Valley. It is believed the party later was set upon by Indians near Chowchilla, and nearly all members perished.

Details of the Savage-Pinney route are completely lacking. It has been as-

sumed by most students of the emigrant routes that they probably came into Death Valley by way of either Daylight or Indian Pass, crossed over Townes Pass to the Panamint Valley and from there by Darwin Wash over the Argus Range to the neighborhood of the present town of Keeler.

At that time the main Indian Trail to the Owens Lake country crossed Death Valley from Daylight Pass and Boundary Canyon to the great Cottonwood Canyon delta. From Cottonwood Canyon it entered Marble Canyon and ascended to the high plateau of the Racetrack country, crossing the head of Panamint Valley near Jackass Springs, from there closely following the present State Route 190 to Owens Lake.

Later, the same trail was universally used by prospectors and pack trains. Even today the route is plainly traced, except where cloudbursts have washed it out or buried it beneath debris.

Hard Rock Shorty of Death Valley



From the lean-to porch in front of the Inferno store the dust devils could be seen in the distance, whirling across the floor of Death Valley. Occasionally one of them would pick up a tumbleweed and carry it spinning into the air and it would disappear in the cloud of dust.

Hard Rock Shorty was dozing on the much-whittled bench.

"They look like miniature tornadoes—the kind we have down in our country," remarked the big Texan who was loafing in the shade of the porch while the Inferno mechanic was putting a new fan belt on his car.

"Do they ever get big enough to do any damage?" he asked Hard Rock. Shorty woke up with a start. "Did you say something to me," he asked.

"Oh, I was just watching those little whirlwinds. Down in Texas they sometimes pick up a whole

house and make kindlin' wood out of it."

"Well, they don't pick up no houses here, because they ain't no houses," Shorty answered.

"But I've seen 'em move a whole sand dune in less 'n two minutes. An' one of them sure helped out my partner, Pigsaw Bill, one summer. Actually saved Bill's life. Happened this way:

"He wuz headin' out across the dunes one summer when he got caught in a sandstorm. It wuz one o' them blasts that take the hair off'n a jackrabbit's back. Only the rabbits wuz all holded in, an' that's what Bill done. Storm lasted two days an' when it wuz over Bill's burro an' his whole pack outfit wuz gone. Had no food, no water, no nuthin'.

"After the wind died down the sun come out blazin' hot—an' here was Bill with the temperature 130 degrees an' the nearest waterhole 25 miles away. Looked like he wuz a goner.

"Them devils wuz playin' around over the valley, an' just about the time Bill figgered he's gonna die o' thirst, one of them little whirlwinds come along an' dropped a bucket right where he wuz sittin'. An five minutes later another one o' them devils come in loaded with water an' filled the bucket. "Yep, they saved Bill's life—that's what they done!"

Gorgeous Wildflower Display to Continue Through May

With lavender sand verberna and white evening primrose, yellow encelia, orange desert mallow and red pentstemon, Nature wove a brilliant April carpet for California's Coachella Valley. The peak of verberna and primrose flowering came the last week in March, and hundreds of visitors, many of them with cameras, drove slowly along Highway 111 between Palm Desert and Indio to see one of the best floral displays in years. The more ambitious discovered wild canterbury bells and desert hyacinths in canyons a short hike from the road. Many photographers concentrated their efforts on desert lilies, which were blooming in profusion near Mecca.

Purple phacelia, commonly called wild heliotrope, white desert chicory, various members of the sunflower clan, later species of primrose and myriads of less conspicuous blossoms also appeared in March to promise more April blossoms.

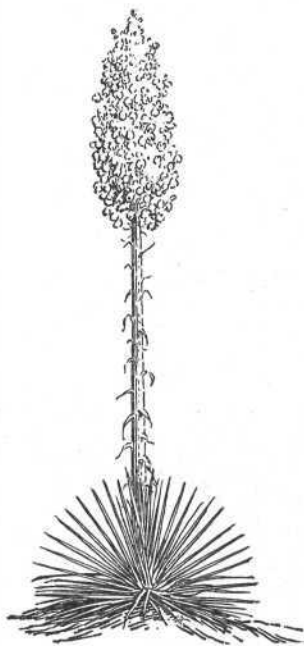
By May the massed purples, whites and yellows of lowland annuals will have faded; but many other annuals and most of the perennials in higher elevations will be attaining fullest blossom. These include most varieties of cactus, yucca, ocotillo, nolina, agave, palo verde and smoke tree.

Generally predicting continued color in May, *Desert Magazine* wildflower correspondents report from various Southwest areas as follows:

Lake Mead Recreational Area — "There is every reason to believe the Lake Mead flower display will continue through most of May," Russell K. Grater, park naturalist, wrote late in March. "There should be a good showing of desert mallow, desert marigold, brittle bush, yucca, strawberry cactus, barrel cactus, desert beauty or indigo bush, sting bush, creosote bush and four-o'clock. Likely the beavertail cactus will still be out as well as the bear poppy, although the latter may come along faster than now indicated. These will be the more showy plants. There will also be a wide variety of smaller flowers, like gilia and various types of composites." Grater reminds wildflower seekers the Joshua trees will be in blossom in May, but predicts the display probably will not match the exceptional flowering of last year.

Mesa, Arizona—Julian M. King of Apache Junction labels his previous

predictions for a wonderful wildflower year "conservative." "The desert throughout this beautiful country surrounding the Superstition Mountains has blossomed beyond belief," he writes, "and we expect a parade of flowers right through May. There are whole fields of scarlet mallow, wild mustard, lupine and desert hyacinth. In the mountains, Indian paint brush is blooming everywhere. Poppies and buttercups are profuse, especially on west slopes. All this magnificence in spite of a cold, rainy March! Warm



weather is ahead, and with it will come more and larger flowers." King predicted cactus would start in late April with some of the blooms remaining into May. Barrel cactus, cholla and Saguaro are among the later flowerers.

Casa Grande National Monument—In Arizona, cool weather and rain haven't delayed annual flowers. "In fact," says A. T. Bicknell, superintendent of Casa Grande National Monument, "the flower display seems to be running a little ahead of schedule." Although most plants will have blossomed by May, that month will be a good time to see cactus blossoms. A good display is expected from the compass cactus, Arizona rainbow cactus and the saguaro north of Florence and Sacaton. Ironwood and catsclaw also should be in full blossom.

Saguaro National Monument—May will crown the giant saguaros with



creamy white blossoms and bring varicolored flowers to the smaller cacti in the monument area near Tucson. Superintendent Samuel A. King noted well-advanced buds on the hedgehog cactus as early as late March and predicted that chollas would flower through the month of May. "This year has been excellent for wildflowers, particularly the desert dandelion, spreading daisy, phacelia, owl clover, bladderpod, desert poppy, jewel flower, brittlebush, lupine and desert marigold," he said.

Death Valley National Monument—Mid-March rains started germination of desert flowers in Death Valley, altering the picture considerably since March and changing Superintendent T. R. Goodwin's pessimism into hope for a good 1952 display. "If weather does not turn too hot and windy before Easter," he wrote in late March, "there should be a good display in late April. I am afraid hot spring winds will wither and kill the plants at lower elevations before they can amount to much. However, at elevations above 4000 feet the display eventually should be exceptionally fine and run well into June."

Antelope Valley — "Almost everywhere in Antelope Valley are evidences of flowers to come," Jane S. Pinheiro, *Desert* flower correspondent, reported March 25. "At the base of each creosote bush, sage brush and desert shrub is a spot of fresh green. Seedlings of lupine, phacelia, larkspur, brown-eye primrose, desert candles and mimulus are to be seen in the Hi Vista area. Dune primrose, yellow primrose and sand verberna are not in evidence yet, but they will be along. Meanwhile, bulbs of wild onion, muilla, mariposa, brodiaea and zygadene are sending up exploratory leaves, and the Joshua trees support more blossom spikes than usual." Mrs. Pinheiro promises a good display the last of April, through May and into June.

Joshua Tree National Monument—The month of March produced an unusual abundance of flowers along the road between Cottonwood Spring and Highway 60-70. Viewing Joshua tree, Mojave yucca and cacti buds the end of March, Frank R. Givens, monument superintendent, predicted April and May would produce outstanding displays. The large showy blossoms—Joshua, yucca, nolina and the many cacti—still will be in evidence in May

as will some of the late-blooming annuals of the higher elevations.

Mojave Desert — "Everywhere the desert is bursting into bloom—blue lupine, owl clover, Indian paintbrush, bush poppy, brodiaea, desert dandelion, poppy, sand verbena, desert star, godetia and many others," wrote Clark W. Mills from Trona, California, the last of March. "There are very few flowers beside the highways, but myriads grow in the canyons a short walk away. Particularly good fields may be seen by driving on Highway 468 between Mojave and Kramer's Four Corners; on Highway 395 from Phelan through Kramer's Four Corners, Red Mountain, Johannesburg, Inyokern and Brown; and on the county road leaving 395 between Red Mountain and Johannesburg to Searles Valley and Trona." Dave Adam predicts Wild Rose Canyon will have the most outstanding display of panamint daisies and wild roses in 15 years. In the bud stage late in March, blossoms will be out the latter part of April and the first of May. Many of the bushes, including purple sage and rabbit bush, will be in bloom. In the more remote sections, one will find the Mariposa lily, night-blooming cereus and a few native California poppies. Buttercup and lady's slippers may be seen in the more sheltered locations, but not in great abundance.

Mills cautions hikers that warm weather has brought out desert reptiles as well as desert flowers. Several sidewinder rattlesnakes have been reported in Searles Valley. It is wise to be alert when walking through the fields of wildflowers, as snakes coming from hibernation are nervous and apt to strike at any moving object. "Just be careful," he advises. "There is no danger to anyone who is alert."

Mojave Desert—"I feel confident April and May will fulfill abundantly the early promise of a beautiful display," wrote Mary Beal, desert botanist of Daggett, California. Flowers started to bloom late in March in most Mojave Desert districts, with particularly good displays around Mt. Pisgah, on lower slopes of the Ord region, and at the base of the Calico Mountains. First to appear were sand verbenas, wooly breeches, Fremont phacelias, Mojave poppies, mentzelias, desert dandelion, coreopsis and several species of evening primrose. "Later there will be quantities of desert sunflowers, marigolds, gillias and numerous 'small fry'," promises Miss Beal. "Desert lilies will come later, after the annuals have reached their prime."

NEW HOSTS AND TRADERS AT RAINBOW THIS SEASON

Visitors to Rainbow Lodge this season will be greeted by new host and hostess—Merritt and Nona Holloway, and perhaps by their three 8, 10 and 13-year-old sons, Tip, Ted and Tom. The Merritts were at June Lake, California last season.

Katherine and Bill Wilson, who have managed the lodge for nearly 25 years will be there part of the season, but the Wilsons are retiring from active association with the Rainbow due to Bill's ill health, and the Holloways are taking over, according to the announcement of Barry Goldwater, who is a partner in the ownership of the well known northern Arizona resort.

The Holloways have a fine background of experience for their new duties as hosts, wranglers and traders at Rainbow. They are natives of north-eastern Oregon and have spent many years—Nona as a teacher and Merritt as a cowboy, guide and wrangler—in the desert West. For two years they were at Deep Springs college in a desert valley 46 miles east of Bishop, California, and it was while taking a group of students from the college on their

annual trip into the Indian country that Merritt first saw Rainbow Lodge. When he returned home he said to his wife:

"I've found the most wonderful place in the world. It would be heaven for you." He was thinking of Nona's interest in archeology, for she has been a collector of artifacts during her many years in the Indian country and Rainbow lodge is surrounded by ancient ruins. Little did they dream at that time that Rainbow eventually would be their home. But the deal was consummated this last winter and the Merritts were scheduled to take over April 1. They will conduct pack trips over the 14-mile trail to Rainbow Bridge, on Navajo Mountain trails, and arrange horseback excursions into Navajo Canyon.

The lodge building at Rainbow burned last season, but the cabins survived the fire, and temporary lounge and mess quarters have been established in the big garage. It is the plan of the owners to rebuild the lodge before the 1953 season.

The Wilsons will remain at the lodge for some time to help the Merritts. Their future plans have not been made known.

Pictures of the Month . . . Contest

During the last three months the desert has offered more beauty than usual to those who like to take pictures. The winter rains brought a much better than average growth of desert verdure—and growing things are always good subjects for photography. But there also are many other photogenic subjects—shadowed rock formations, wildlife, ghost towns, old mines, sunsets and human interest pictures—all of these and many more make the desert a delight to the camera fan.

Desert Magazine's Picture-of-the-Month contest is designed to secure for publication the best of the pictures taken in the desert country each month by both amateur and professional photographers. All Desert readers are invited to enter their best work in this contest.

Entries for the May contest must be in the Desert Magazine office, Palm Desert, California, by May 20, and the winning prints will appear in the July issue. Pictures which arrive too late for one contest are held over for the next month. First prize is \$10; second prize \$5.00. For non-winning pictures accepted for publication \$3.00 each will be paid.

HERE ARE THE RULES

- 1—Prints for monthly contests must be black and white, 5x7 or larger, printed on glossy paper.
- 2—Each photograph submitted should be fully labeled as to subject, time and place. Also technical data: camera, shutter speed, hour of day, etc.
- 3—PRINTS WILL BE RETURNED WHEN RETURN POSTAGE IS ENCLOSED.
- 4—All entries must be in the Desert Magazine office by the 20th of the contest month.
- 5—Contests are open to both amateur and professional photographers. Desert Magazine requires first publication rights only of prize winning pictures.
- 6—Time and place of photograph are immaterial, except that it must be from the desert Southwest.
- 7—Judges will be selected from Desert's editorial staff, and awards will be made immediately after the close of the contest each month.

Address All Entries to Photo Editor

The Desert Magazine

PALM DESERT, CALIFORNIA

Here and There - on the Desert

ARIZONA

Less Than Half to Go . . .

FLAGSTAFF — Now more than half completed, the Black Canyon highway from Flagstaff to Phoenix via the Verde Valley will be the shortest, most feasible route connecting northern and southern Arizona. It follows Arizona's oldest intra-state route and will cut 77 miles from the present Flagstaff to Phoenix distance. The highway is finished from Phoenix to Cordes Junction. To celebrate completion of a second leg in the Cordes to Flagstaff section, state dignitaries met early in March near Camp Verde for ceremonies and discussion of remaining construction contracts.—*Coconino Sun*.

Last Bid Call Issued . . .

YUMA—Contracts are expected to be awarded this spring for construction of the remaining eight miles of the Mohawk Canal plus an eight-mile protective system, according to E. A. Moritz, director of the Bureau of Reclamation's Region No. 3. When complete, the Wellton-Mohawk irrigation system will provide Colorado River water for 75,000 acres of irrigable land beginning 15 miles east of Yuma and extending up both sides of the Gila River for a distance of 40 miles. Construction is expected to be advanced far enough to permit farmers to take Colorado River water by early summer.—*Yuma Daily Sun*.

Run-off Kills Drouth Threat . . .

PHOENIX—Estimating 1952 rainfall so far has been more beneficial than any during the last decade, the weather bureau promised the drouth which has been threatening Arizona cattle, sheep and farming industries is over for this year at least. Reservoirs already were well filled in March, and gradually warming weather was expected to bring increasing amounts of water down Salt and Verde river tributaries and into the lakes.—*Tucson Daily Citizen*.

Okay Campsite Program . . .

PHOENIX—An appropriation of \$40,000 to develop new campsites in the Oak Creek Canyon area was included in the 1952 budget bill adopted by the Arizona legislature. The appropriation will cover new over-night camping areas at Santa Fe flat, Chavez crossing and Baldwin crossing as well as numerous roadside picnic parking spots.—*Verde Independent*.

Sidewinder Joins Zoo . . .

TUCSON—First live specimen presented to the Arizona Desert Zoological and Botanical Gardens is a sidewinder rattlesnake captured near Tucson. It is the first reptile of this type to be found so far east; the sidewinder's natural home is southern California, southern Nevada, southwestern Utah and western Arizona. The snake, sometimes called the horned rattlesnake, is cream colored and has a line of white dots along the spine. It gained its name from its strange method of locomotion. It winds across loose sand, leaving a strange looking trail of parallel "J" marks behind it.—*Tucson Daily Citizen*.

Film Praised for Realism . . .

WINDOW ROCK—Northern Arizona's Navajo reservation was the setting for the factual motion picture, *Navajo*, which is being acclaimed by critics as one of the most realistic portrayals of the American Indian ever attempted. The story centers around a Navajo boy's struggle to overcome his fear of the white man. All of the leading roles are played by Indians who have never acted before. Canyon de Chelly is the principal locale of *Navajo*.—*Salt Lake Tribune*.

Compromise on Wetback Curbs . . .

WASHINGTON—Compromise legislation designed to stem the illegal flow of Mexicans into the United States in search of jobs has been signed into law by President Truman. The measure provides penalties up to \$2000 in fines and five years in jail for anyone who recruits, transports, conceals or harbors an illegal alien. It also gives immigration officers authority without a warrant to search private properties, excluding dwellings, within 25 miles of the border, for illegal immigrants.—*Yuma Daily Sun*.

Reclamation's 50th Year . . .

KINGMAN — During a four-day visit in Arizona, leaders in agriculture, industry and government will view projects which pioneered the development of the West from raw desert land to one of the world's most productive agriculture empires. The occasion is the golden anniversary of the U. S. Reclamation Act. Arizona will take a starring role in the celebration, beginning in Kingman April 29 and extending through May 4 when final ceremonies will be held in Phoenix. Visiting officials will be taken on extensive tours of the state.—*Graham County Guardian*.



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CALIFORNIA

Rising Sea Damages Land . . .

INDIO—Claims totaling \$220,000 were filed against the Coachella Valley County Water District, Coachella, and the Imperial Irrigation District, El Centro, after rising waters caused serious damage to lands along the north shore of Salton Sea. Claimants, Desert Beach Corporation and Ralvert and Company, said the sea rose because of water turned into it through district wasteways and the Whitewater Storm Drain. Rising waters have partially inundated the Desert Beach resort area, they assert, and have impregnated agricultural soil with salt.—*Coachella Valley Sun*.

50,000 Sheep Enter Desert . . .

INDIO—Excellent grazing conditions have brought 50,000 sheep to the desert area between Indio and Blythe. Winter rains produced the first good growth the desert has had in several years, and sheep men in Montana and other northern states are taking advantage of the good pasture by shipping in sheep from places where feed is scarce. Harry Oliver and Desert Steve Ragsdale, California desert rats, have violently protested importation of the sheep, claiming the animals introduce noxious weeds and eat wildflower plants.—*Riverside Enterprise*.

Canal Control Transferred . . .

WASHINGTON—Secretary of Interior Oscar L. Chapman has signed the supplemental All-American Canal contract which transfers control of the canal to the Imperial Irrigation District. The new contract also gives the district full right to go ahead with power installations at Pilot Knob.—*Imperial Valley Weekly*.

"Barnacle" Continues as "Sun" . . .

COACHELLA—Coachella Valley Sun is the new name of Coachella Valley's pioneer newspaper, first published in 1901 as the *Coachella Valley Submarine*. Now published by Ward Grant the paper was founded by S. F. Freeman, who named it the *Submarine* because it was published below sea level. For many years the masthead carried the line, "The Most Low Down Paper on Earth." It was renamed the *Desert Barnacle* in 1946.—*Coachella Valley Sun*.

Discover Rich Fossil Bed . . .

EL CENTRO—Imperial Valley desert lands, once the floor of an inland sea, give promise of being a rich hunting ground for ancient fossils and early Indian relics. Newly discovered beds in the desert have yielded bones of ancient mammals and a number of large oyster shells.—*Yuma Daily Sun*.

Traffic Entries Tabulated . . .

DAGGETT—According to figures released by the California Department of Agriculture, Bureau of Plant Quarantine, a total of 152,697 automobiles, 23,890 trucks and 444,074 passengers entered the state in February. Yermo was largest portal of entry, registering 36,263 vehicles and 83,516 passengers. Other totals for southern ports were: Blythe, 25,801 cars, 5,057 trucks and 77,512 passengers; Daggett, 11,077 cars, 844 trucks and 34,608 passengers; Fort Yuma, 27,523 cars, 4,532 trucks and 83,283 passengers; Parker, 7,948 cars, 827 trucks and 21,170 passengers.

Mark Historic Birthplace . . .

BORREGO SPRINGS — Marking the place where the first white child was born in California on Christmas Eve, 1775, a monument was formally dedicated April 5 during the Fourth Annual de Anza Jeep Caravan from Hemet to Borrego Springs. The Roads to Romance Association erected the monument and bronze plaque in Coyote Canyon several years ago. The April ceremony marked its presentation to Riverside County.—*Riverside Enterprise*.

Okay Land Development . . .

PALM SPRINGS—Agua Caliente tribal leaders have approved a modified federal plan for zoning and street improvements on reservation lands in Palm Springs. Only question remaining at issue is whether to route Indian Avenue around the Agua Caliente baths or to set the historic hot springs building back several hundred feet.—*Desert Sun*.

Plan Desert Marine Center . . .

TWENTYNINE PALMS — Construction of a \$15,000,000 Marine Corps artillery and antiaircraft center 8 miles from Twentynine Palms was expected to begin in mid-April. The 400-square-mile base is bordered on the north by Highway 66 and includes much of the Bullion and Lead Mountains. Plans call for accommodation of 7200 officers and men.—*Los Angeles Times*.

Harvest Almost \$16,000,000 . . .

BLYTHE—Almost doubling 1950 harvest totals, Palo Verde Valley crop returns for 1951 climbed to \$15,985,491. Cotton, at \$5,155,304, lettuce, cantaloupes, alfalfa and watermelons led production in that order. A total of 62,036 acres were under cultivation.—*Palo Verde Valley Times*.

NEVADA

Caution Lake Mead Fishers . . .

BOULDER CITY—Anglers fishing in Lake Mead, Lake Mojave or Colorado River areas bounded by Nevada and Arizona are warned they must have a license from one of the states and a \$2 use permit from the other. Presumably an angler who remains on the bank of either state would need only a license for his state.—*Los Angeles Times*.

New Dam Generator Installed . . .

BOULDER CITY—A-9, the next to last generator to be installed in the Hoover Dam powerhouse, whirled into test action March 4. The 50,000-kilowatt capacity machine was to be tested for a period of from five to 10 days,

then put to steady work producing power for Southern Nevada. The generator is the first to be owned by the state of Nevada.—*Pioche Record*.

Jackrabbits Take Toll . . .

EUREKA — Nevada grain fields, stack yards and alfalfa fields have undergone serious damage this year as a result of the heavy jackrabbit population. To abate the destruction, extensive poisoning campaigns are being conducted. Frank E. Morrow, Department of Agriculture extension agent in White Pine and Eureka counties, urged all ranchers to cooperate, pointing out that a partial kill would be of little value.—*Battle Mountain Scout*.

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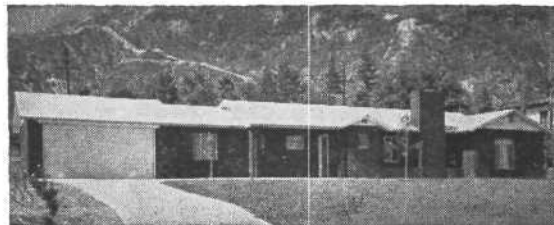
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LOS ALAMOS, NEW MEX.

Name Boulder City Manager . . .

BOULDER CITY—Boulder City's first city manager under the new regulations set up last summer for administration of the dam community, will be Harold N. Corbin of Porterville, California. It was expected that Corbin would be confirmed by Secretary of Interior Oscar L. Chapman and that he would take over his duties by the first of April. — *Las Vegas Review-Journal*.

First Bighorn Hunt Set . . .

LAS VEGAS — Southern Nevada has one of the largest herds of bighorns in the West, but the animals have been protected from hunters for many years. Now, to remove 50 of the older rams from the herd, a select group of hunters was authorized to shoot the mountain sheep, one of the country's finest game animals, in a special season April 12-29. Fifty tags were awarded at drawings in Las Vegas. No independent hunting is permitted; each tag holder must be accompanied by an experienced guide. — *Battle Mountain Scout*.

Times-Bonanza Sold . . .

TONOPAH—Bob Crandall, former owner and publisher of the *Goldfield News and Beatty Bulletin* and more recently of the *Boulder City Citizen*, is new owner of the *Tonopah Times-Bonanza*. The sale was announced by Don and Starle Terrell, who have been publishers since the death of their father, Clyde S. Terrell, in 1950. Crandall also plans eventually to resume publication of the *News-Bulletin*, printing it in the *Times* plant. — *Tonopah Times-Bonanza*.

Ample Water Supply Assured . . .

RENO—For the first time in 15 years, virtually every section of Nevada will have an ample water supply this summer, reported the Nevada Co-operative Snow Surveys committee. Basing their forecast on results of the annual March 1 snow survey, the committee said water content on all 15 water courses is far above normal. "Not only is there enough water in prospect," a spokesman said, "but in some places there will be too much water. There are some dangerously deep snow packs in the Sierras and in eastern Nevada." — *Las Vegas Review-Journal*.

NEW MEXICO

Navajos Allow Ore Search . . .

WASHINGTON—Regulations have been approved which will open up the Navajo reservation to full scale uranium mining. Mining has been held back because Navajo discoverers of uranium deposits lacked capital and

technical knowledge to develop them. Sam Akeah, chief of the Navajo Tribal Council, said 60 Navajos have rich samples of uranium ore taken from discoveries they have made but kept secret until they could be protected by permits assuring royalties to both individual and tribe. The new regulation will permit the Indians to lease their mining permits to non-Indian operators. — *Gallup Independent*.

Indian Project Begun . . .

GALLUP—Living quarters, a clinic, check room, snack bar and recreational facilities are included in plans for a new Indian Center in Gallup. Ground has been cleared and leveled and construction has begun. In addition to a federal appropriation of \$185,000, citizens of Gallup donated \$30,000 to the project. The rambling one-story building will be of concrete block construction. — *Gallup Independent*.

New Water Sources Needed . . .

WASHINGTON—"The Southwest must find new sources of water or its future economy will be in jeopardy," warned Secretary of Interior Oscar L. Chapman in a report entitled *The Drouth in Southwestern United States*. The paper said the 10-year water shortage which has harrassed the area is one of the eight most severe since the 13th century. "In the absence of abundant rain, dependable relief will be assured only through early importation of water from available sources in other areas or through additional storage on streams which now are wasting water to the ocean." According to the report, the best source appears to be the coastal streams of the Pacific Northwest and Northern California and the ocean itself. — *Yuma Daily Sun*.

Bomb Crater Monument . . .

ALAMOGORDO—A bill to establish "Trinity National Monument" at the site of the first atomic bomb explosion has been introduced in Congress. The historic explosion occurred July 16, 1945, at Trinity, New Mexico, 60 miles northwest of Alamogordo. Rep. A. M. Fernandez of New Mexico introduced the bill to prevent the Atomic Energy Commission from filling in the bomb crater with earth. — *Alamogordo News*.

Urge Better Tourist Plan . . .

TAOS—Although the 1950 census listed 747 "resorts" in the state of New Mexico, a recent survey conducted by the National Resort Association was able to uncover only 73 which qualified. "The greatest potential for the state's tourist business lies in the Taos area," said J. W. Johnson, president of the National Resort Association.

"but you can't hold people who come through here without greatly improved and expanded facilities." Johnson cited publicity and a well-rounded public relations program as being vital to proper expansion of the tourist business.—*El Crepusculo*.

Game Season Dates Set . . .

SANTA ROSA—New Mexico State Game commissioners juggled the dates of the 1952 big game season so that hunters will have two full week-ends during the 11½ day period. The season will run from noon, November 8 to sunset, November 19. Big game bag limits remain as before: one deer, one turkey and one bear for the year. Elk, antelope, special deer and game bird seasons will be set in August.—*Santa Rosa News*.

UTAH

Asks \$2,000,000 Fund . . .

WASHINGTON—An appeal for the federal outlay of \$2,000,000 for reseeding range lands of national forests in the West was made by Rep. Walter K. Granger of Utah when he testified before the agriculture subcommittee of the House Appropriations Committee. The Utahn asked the committee to appropriate \$1,245,000 in addition to the \$750,000 requested in the President's budget for reseeding under the 15-year program authorized under the Anderson-Mansfield Act of 1949.—*Vernal Express*.

Zion, Bryce Chief Named . . .

WASHINGTON—Secretary of Interior Oscar L. Chapman has announced appointment of Paul R. Franke as superintendent of Zion and Bryce National Parks, succeeding Charles J. (White Mountain) Smith. In addition to running Zion and Bryce, Franke will be co-ordinating superintendent of Capitol Reef, Cedar Breaks, Timpanogos Cave and Zion National Monuments in Utah and Pipe Spring National Monument in Arizona.—*Salt Lake Tribune*.

Utah Grazes Record Herd . . .

VERNAL—According to the annual report issued by the Bureau of Agricultural Economics, the number of cattle on Utah farms and rangelands reached an all-time high on January 1, 1952. The total of 679,000 head reported was 11 percent higher than a year ago and the largest number ever reported in the state's history. Most of the cattle are of the beefsteak variety, but milk cows have increased three percent over the 1951 count. The report also indicated horses, stock sheep and lambs have been decreasing steadily, but hogs and pigs are up ten percent over a year ago.—*Vernal Express*.

Picnic Areas in Peril . . .

SALT LAKE CITY—Dollars which do not go as far when spent, and increasing patronage of forest picnic grounds have posed major problems for U. S. Forest Service administrators hopeful of continuing operation of Utah recreational areas. Without increased 1952 appropriations, which seem unlikely, there are three alternatives to successful management: 1. Giving control of suitable areas to private operators under special permits; 2. Additional assistance from local governments; 3. As a last resort, closing some of the areas. Continued operation of recreational areas with inadequate supervisory personnel, inadequate sanitary and safety facilities involves risks to lives and personal property and creates sanitary problems affecting thousands of acres of watershed lands which drain into municipal water supply systems, it was pointed out.—*Salt Lake Tribune*.

Plan New Oil Line . . .

SALT LAKE CITY—Construction will start this year on an \$8,000,000 petroleum products line from Salt Lake City to Boise, Idaho. The 330-mile, eight-inch diameter facility will parallel existing facilities of the Salt Lake Pipe Line Company, an affiliate of Standard Oil Company of California. "Completion of the line will boost transportation capacity along this route from 22,000 barrels to 39,500 barrels daily," announced a company spokesman.—*Salt Lake Tribune*.

Largest Hunt in History . . .

VERNAL—Utah hunters killed 101,947 deer during the 1951 hunts, according to figures released by the Utah Fish and Game Department. The totals indicate an 83.8 percent kill, the best hunt in the state's history, and 28,551 animals greater than the 1950 toll. The sharp increase was attributed

to the open season for either sex, tried in Utah last year for the first time. The hunt was considered highly successful from a game management standpoint, but the effects of the additional harvest are yet to be studied during the spring counts.—*Vernal Express*.

Indians Predict Late Spring . . .

FT. DUCHESNE—Officially speaking, spring arrived March 20. But the Indians who live in Utah's wilds—after reading Nature's signs—say there will be little or no spring this year. The same Indians, members of the Ute-Ouray tribe, read the signs last November and predicted a hard winter. By March 20 the snow drifts still were deep on reservation lands.—*Salt Lake Tribune*.



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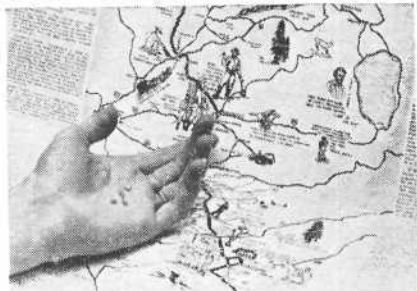
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Utes to Get Better Lands . . .

FT. DUCHESNE—Since Ute Indians are primarily stockmen and are not particularly suited to farming, more and more of them are investing their share of Colorado judgment money in cattle. This demands an increase in grazing and pasture acreage, for present range limitations hold each Indian to but four and a half head. To move tribal ranchers closer to their ranges and to supplement present grazing areas with irrigated pastures, a long range land program has been announced. Approximately 8000 acres of tribally-owned land, presently under lease to white residents of the area, will gradually be relocated to the In-

dians. Work has already begun to clear 1000 acres of virgin land which will be used for livestock purposes.—*Vernal Express*.

Tunnel Completion Near . . .

KAMAS—With sufficient appropriation from Congress, the Duchesne Tunnel, which holed through late in 1951, could be completed by 1953. The tunnel connects the Colorado River Basin with Salt Lake Valley. A request for \$2,310,000 to complete the tunnel and continue other work on the Provo River Project was contained in President Truman's budget submitted to Congress for the 1953 fiscal year.—*Salt Lake Tribune*.

Here is Annual Run-Off Forecast For Colorado River, Tributaries

February precipitation was much below normal over the entire Lower Colorado and most of the Upper Colorado Basins, causing a downward revision in the U. S. Weather Bureau's water supply forecasts for the Southwestern United States. The outlook in March, though less promising than in early February, still indicated above-average run-off.

Reports from the various drainage sheds are given as follows:

Colorado River above Cisco: The outlook for the Taylor River and the Colorado and its tributaries above Cameo remains excellent. Less promising are reports from the Dolores and Uncompahgre Rivers where median forecasts predict below-average flows.

Green River Basin: The water supply outlook for the Utah tributaries and for the Yampa and White Rivers is very good. However, for the upper Green River the prospects are for flows less than the 10-year average; for this basin to attain normal run-off the March-June precipitation must approach the maximum of record.

San Juan River Basin: As a result of the light February precipitation, water supply forecasts for the San Juan Basin are three to 10 percent lower than those last issued. Slightly above average flows are still expected for the basin if precipitation for the balance of the season is near normal.

Little Colorado River Basin: Although forecasts for the Little Colorado River Basin are considerably lower than those issued in February, the outlook remains excellent.

Gila River Basin: February precipitation was much below normal. The greatest deficiencies were noted in the upper Gila and upper Verde water-

sheds where monthly amounts were less than 20 percent of normal. More encouraging, however, was the storm of March 1-2 which brought considerable moisture to the Salt and Verde River Basins. In spite of the light precipitation, the water supply outlook remains encouraging. Reservoir storage is above average, and soil moisture conditions are excellent. The outlook for the main stem of the Gila River is for flows slightly less than the ten-year average but greatly exceeding the low flows of the past two years.

RATTLE DOES NOT TELL AGE OF A RATTLESNAKE

The persistent story that the age of a rattlesnake can be told by the number of segments or joints in its rattle is false for several reasons.

The first time a baby rattler sheds its skin, usually within a week or two after birth, it acquires the button which is the first segment of a rattle. Thereafter another segment is added each time the skin is shed, three or more times a year and not just once. The button is displaced farther and farther from the tip of the tail.

If a rattlesnake retained all the segments that were added to its rattle, in a few years it would be carrying around an enormous string of a dozen and a half or two dozen segments. Such phenomenal rattles are never seen in nature. Segments are continually lost through wear and breakage. An adult rattlesnake with a perfect string—that is, with the original button present at the tip—is very unusual. Captured rattlers usually have from five to nine segments in their strings. Occasionally one is reported with as many as 15.

Gems and Minerals

OUTSTANDING GOLD DISPLAY PLANNED AT ANGELS CAMP

Grinding out gold ore and making recoveries on amalgamation plates, a complete water-powered stamp mill will be in operation at the 1952 convention and show of the California Federation of Mineralogical Societies, June 20-22 at Angels Camp, California. Calaveras Gem and Mineral Society will be host.

An outstanding gold display is planned. The world's largest drill core will be shown, a section of rock 4½ feet in diameter and almost 6 feet long. Value of ore and nugget specimens is expected to exceed \$100,000.

The Calaveras Society invites all gem and mineral collectors to attend the three-day show. Dormitory, camping and trailer facilities will be available on the convention ground; motel and hotel accommodations for 500 persons are being arranged in Angels Camp and the immediate vicinity, and additional accommodations lie within a short drive of the convention site.

Members of Everett Rock and Gem Society, Everett, Washington, were urged to bring their most photogenic rocks to the April meeting. Paul Alley, scheduled guest speaker, promised to set up complete equipment and demonstrate techniques of photographing mineral specimens.

SOUTHWESTERN MINERALS FEATURE OF GLENDALE SHOW

Emphasizing minerals from the desert Southwest, the Glendale Lapidary and Gem Society will hold its Fifth Annual Exhibition May 17 and 18 in Glendale Civic Auditorium. On special display will be a 500-carat aquamarine, largest cut aquamarine of its color to come out of Brazil; one of the largest carved amethysts in the world; an outstanding oriental jade collection; amethyst geodes from Uruguay; pink rhodochrosite from Brazil and flat sections of petrified trees from Wyoming and Utah.

One exhibit will illustrate various stages in cutting and polishing a cabochon, a heart and a cross from rough material. Also shown will be three carved opals, one representing the Aztec sun god set in a gold ring of Aztec design.

Glendale Society's show last year drew an attendance of more than 10,000 persons. To better accommodate visitors this year, the group has rented the entire second floor of Glendale Civic Auditorium. Doors will be open from 9 a.m. to 9 p.m. Saturday and from 9 a.m. to 6 p.m. Sunday.

"Various Phases of Agate" was the subject of Mr. and Mrs. K. O. Stewart, speakers at a regular meeting of Wasatch Gem Society of Salt Lake City. Mr. Stewart is a past president of the group.



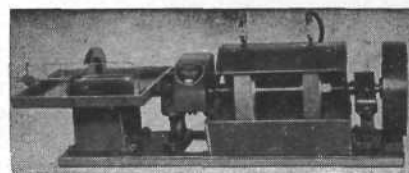
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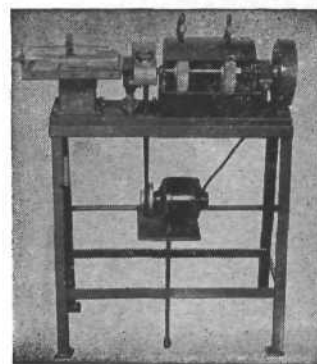


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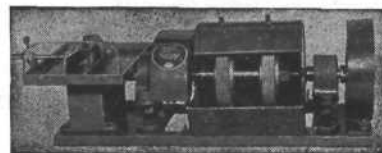
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AMONG THE ROCK HUNTERS

Colored slides illustrated Ray Kepner's "Outline of New Mining Developments in San Diego County" for San Diego Mineral and Gem Society. Kepner is affiliated with the San Diego County Division of Natural Resources.

Roland Andreau, who as a young chemist assisted the Curies in their Paris laboratory, told San Gorgonio Mineral and Gem Society of his work with radium and uranium. Andreau explained how, through the use of chemical analyses and spectroscopes, scientists can determine the composition of minerals and the mineral content of ores. Society members brought samples of rock to be tested by Andreau's blue light.

Pegmatite Formations in San Diego County by Dr. Richard Jahns is the first book in the technical library of Twenty-nine Palms Gem and Mineral Society. A book a month will be purchased by the society, from funds collected at each meeting's grab bag sale.

As preliminary ground work for a field excursion, Verne Byrne recounted for Santa Fe Gem and Mineral Club "The Historical Background and Current Mining Activities in the Cerrillos Hills." Byrne has lived in these hills most of his life, and presently owns and operates the Pennsylvania Mine and other mining properties in the area.

Ogden Scoville will serve as president of Humboldt Gem and Mineral Society of Eureka, California, in 1952. On his board are W. R. Lamb, vice-president; George A. Morgan, secretary-treasurer, and Ella Glines, librarian.

Beginning with the March meeting, a gem show is planned each month by Searles Lake Gem and Mineral Society, Trona, California. A panel of judges will be chosen from the membership, and awards will be made.

March field trip of the Mineralogical Society of Southern California was to Tick Canyon, California. According to Grant Ostergard, field trip chairman, howlite, zeolite, agate and borate minerals are to be found at the site.

Rich colors of agate were displayed in colored slides viewed by members of Yavapai Gem and Mineral Society at a meeting in Prescott, Arizona. The slides, taken by Dave Harris of El Paso, Texas, were photomicrographic pictures of thin agate sections submerged in water.

Emett Soule of Chappell, Nebraska, is new president of Western Nebraska Mineral Society. E. P. Chipman of Sidney is vice-president, and Mrs. Walter Peck of Chappell is secretary-treasurer. Newly elected member of the board is Paul Bergstrom of Chappell.

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It was suggested at a meeting of El Paso Mineral and Gem Society that an informed geologist be invited on all club field trips to explain ages and formations of different locations. Specimens secured at the site would be examined at the next meeting, classified and identified by a trained mineralogist.

Dr. William E. Powers of Northwestern University, scheduled speaker for the March meeting of the Earth Science Club of Northern Illinois, chose as his topic, "The Eskimos of Greenland and Labrador." He discussed not only the native inhabitants of these northern countries but also the geology and physiography of the area.

Looking for antigorite specimens, Calaveras Gem and Mineral Society staged a field trip to Tuolumne County, California.

Herb Coney of Santa Rosa, California, told members of Redwood Gem and Mineral Society tales of early gold mining days in Alaska. The speaker displayed samples of gold from the northern territory and from California rivers.

News in verse is sent each month to members of Fresno Gem and Mineral Society whose bulletin, *Chips* is written in sextains by Pat Michaelis, rhyming editor.

Professor Grant Steele of the University of Washington gave an illustrated lecture on "Gem Locations in Utah" at a general meeting of the Gem Collectors Club of Seattle.

Outlining non-chemical methods employed in the identification of mineral specimens, Professor Paul H. Keating, Colorado School of Mines, was guest speaker for Colorado Mineral Society. Crystallization, cleavage, luster, specific gravity, hardness, magnetism, taste, color and texture were included in Keating's list of basic qualities to observe.

Experts in the fields of mineralogy, lapidary and gemology answered questions at a quiz meeting of the Gem and Mineral Society of San Mateo County, California. Questions were asked first by a panel composed of Howell Lovell, Francis Marshall and Beth Olop and then from the floor. Dr. C. M. Swinney of Stanford University was mineralogy expert and Francis J. Sperisen of San Francisco, author of *The Art of Lapidary* handled lapidary queries.

Describing the process of wax casting from beginning to finished product, Carl T. Wood was March speaker for the Los Angeles Lapidary Society. Wood is a dental technician. He illustrated his lecture with blackboard drawing and displayed materials and tools used, the casting machine, firing oven, wax mold and finished mold.

Kenneth McKenzie, certified gemologist and member of the American Gem Society, was featured speaker at a recent meeting of Shadow Mountain Gem and Mineral Society, Palm Desert, California. McKenzie is an expert in gem identification and often is called upon by the government to make appraisals.

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Elected by the Gem Cutters Guild of Los Angeles at a recent election meeting were E. H. Rauls, regent; R. E. Nowak, marquis; Mariana Nowak, tablet; Helen Gustafson, cuvette, and Adrian McClure, baguette.

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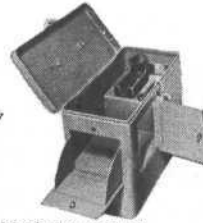
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Intricate workings of the electron microscope were explained by Jack L. Taylor of the California Institute of Technology Jet Propulsion Laboratory at a meeting of Pacific Mineral Society. Photographic studies of vanadium pentoxide, magnesium oxide and diatomaceous earth—from 7000 to 50,000 times natural size—revealed crystal habits and molecular structure.

News Letter, bulletin of the Georgia Mineral Society, for several months has been running an illustrated series of articles on "Caves of Georgia." Directions to the caves, as well as history, size and structure, are given.

Installed at recent ceremonies were new officers of Whittier Gem and Mineral Society: Kenneth W. Tharp, president; George Cyrog, vice-president; Olin Armstrong, second vice-president; Eleanor Tharp, secretary, and Mary Frances Berkholz, treasurer. New directors are Colin Mayhew, Bill McIninch and James Kirker. Francis P. Croft, retiring president, is the federation director.

Two motion pictures on diamond mining were shown on a recent program of the Mineralogical Society of Arizona. One film showed the mining and processing of gem-bearing material from the Kimberly Mine in South Africa. The other described alluvial diamond mining in the Minas Geraes district of Brazil.

Clarence Chittenden commented upon colored slides of agate specimens—moss, plume, iris and scenic varieties—projected for members of Pasadena Lapidary Society. The agates were collected in Texas, New Mexico, Mexico and Oregon and photographed by Dave Harris of El Paso, Texas.

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ANNUAL MEETING, SHOW SLATED FOR FORT WORTH

Annual meeting and show of the State Mineral Society of Texas will be held May 2 to 4 at Pioneer Palace in Fort Worth, Texas. Exhibits will be open from 9:30 a.m. to 9:30 p.m. all three days. Swap time will begin May 4 at 1:00 p.m. and will continue until the end of the show.

SAN MATEO SOCIETY ANNOUNCES SHOW DATES

Third annual show of the Gem and Mineral Society of San Mateo County will be held May 3 and 4 in conjunction with the geology department of San Mateo Junior College. The college gymnasium will house exhibits, reports Walter Reinhardt, general chairman.

DOWNEY DELVERS PLAN SECOND SHOW MAY 3-4

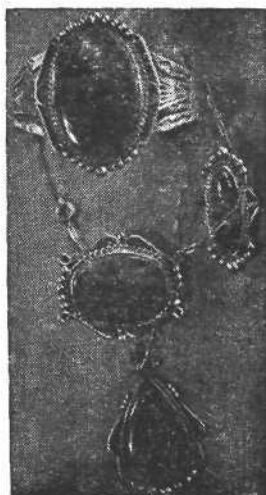
Downey Gem and Mineral Society of Downey, California, has announced May 3 and 4 as dates for its second annual show, to be held in the Simms Park Community Building, Bellflower. Among attractions will be scenic plumes cut and polished from Friday Ranch nodules; Texas calcite roses, some of them as large as two feet in diameter; mineral displays in rough, cut, polished and fluorescent specimens; faceted gems and exhibits of lapidary machinery and equipment.

Three talks were scheduled for one evening program of Compton Gem and Mineral Club. Bob Benefiel spoke on "Synthetic Stones"; Veryl Carnahan discussed fluorescents, demonstrating different types with the use of lights; and G. S. Kennedy offered a chalk talk on "Point Carving of Stones."

Led by Dr. Keith Young of the field trip committee and E. A. King, president, members of the Austin Gem and Mineral Society collected selenite Xls and fossils in the Bastrop-Smithville area of Texas.

Showing material from all over the world, Dr. W. E. Carter told Northern California Mineral Society members about his hobby of collecting and polishing marble. For the same meeting, Lloyd Mehegan and Cecil Iden exhibited jewelry.

Colonel Keirstead will lead activities of San Diego Lapidary Society this year. On President Keirstead's executive board are Lee Weatherbie, first vice-president; Fred Grunner, second vice-president; Ruth Weatherbie, secretary; John Underwood, treasurer, and Viola Higginson, historian.



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"Catlinite," or pipestone, was described by Carl Swartzlow of the National Park Service when he spoke before members of Nebraska Mineral and Gem Club, Omaha. Catlinite is found only in Pipestone County, Minnesota. According to Indian legend, it was formed from the congealed blood of dying warriors.

Rain storms couldn't stop rockhounds of Convair Recreational Association, San Diego, California, from a camping trip to Escondido. Sunday they searched for clear and smoky quartz crystal, garnet, tourmaline and beryl.

Fifty cabochons were collected by San Antonio Rock and Lapidary Society for distribution to patients at Brooke Army Hospital.

Find of the day on a recent San Diego Lapidary Society field trip was a 25-pound piece of salmon colored petrified palm root. The lucky lapidary was "Dee" Dietrich.

The gemstone discovered in 1945 by Count Taaffe is known as Taaffeite (pronounced Tarfite), reports the news bulletin of San Diego Lapidary Society. Taaffeite is the only known substance where a mineral contains essential beryllium and magnesium together.

Outlining mining developments in San Diego County, California, Roy Kepner was guest speaker at a meeting of San Diego Mineral and Gem Society. He illustrated his remarks with colored slides.

To complete Coachella Valley Mineral Society's community kitchen outfit, Martha Danner made aprons, chef's hats, hotpad mats, dish towels and crocheted dish cloths and presented them to the club.

Quicksilver minerals from Knoxville Mine and banded silica onyx from Manhattan Mine, both near Oakland, California, were gathered on a recent field trip of East Bay Mineral Society. The area also yields myrickite and fluorescent calcite.

Intricate designs of agate sections, as revealed through microscopic photography, were viewed by the Victor Valley Gem and Mineral Club. Speaker of the evening was Bert Dunham, who described methods of the diamond mining and cutting industries.

"Geology of the North Shore of Lake Superior" was the subject of Dr. George Thiel, chairman of the geology department of the University of Minnesota when he spoke before the Minnesota Mineral Club. The Northwestern section of Minnesota is part of the Laurentian Shield which, according to Dr. Thiel, contains the oldest rocks in this continent. "In fact, the oldest known rock on earth, the 'Ely greenstone', believed to be more than 2,000,000,000 years old, was found in this area."

Members of the Chicago Rocks and Minerals Society learned about mastodons when Dr. Clarence H. Smith spoke at a general session. Plans for a field trip to the areas where mastodon fossils have been found were discussed.

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Rem Heater, president; Bob Follett, vice-president; Yancey Winans, secretary, and Mrs. Henry Ewing, treasurer, comprise the new board of Marcus Whitman Gem and Mineral Society, Walla Walla, Washington.

Although the common variety is a rather important rock-forming mineral, about the only use for tourmaline is for gems. The less brittle crystals make excellent radio frequency control crystals. However, an extreme scarcity of good material in large enough pieces sharply limits this use. Tourmaline's optical properties were long employed for producing polarized light in laboratories, but synthetic substitutes now are made at much less expense.—*Sooner Rockologist.*

Silver was the subject of April discussions of the mineral resources division of San Diego Mineral and Gem Society. Lyle Hunt spoke on "Silver of the Panamint."

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CLARK COUNTY COLLECTORS PLAN SHOW IN NOVEMBER

Clark County Gem Collectors have selected November 8 and 9 as dates for their 1952 show. Exhibits will be arranged in the War Memorial Building and City Hall, Las Vegas, Nevada. Last year's show attracted 3000 visitors. Paul Mercer, show chairman, hopes to triple that number this year.

Dr. W. E. Carter, whose hobby is collecting and polishing marble, spoke to members of the Northern California Mineral Society at a meeting in San Francisco. His marble slabs, which come from all over the world, range in color from purest white through all the intermediary grays to intense black.

"Jade carving should be done with a specific artistic design in mind," G. S. Kennedy advised the Hollywood Lapidary Society, "and frequent sketches, both on paper and on the stone itself, should be made while work is in progress." Kennedy, who has executed many carvings in jade, gave his listeners specific instructions for undertaking this phase of the lapidary art.

Four speakers discussed agate at the March meeting of Dona Ana County Rockhound Club, Las Cruces, New Mexico. Ruth Kilgore described different varieties of agate, showing examples of each; Jesse Patty listed geological formations in which agate might be expected to occur; J. T. Kilgore explained nature's processes in forming agate; and Mary Brookreson discussed commercial value and marketing of the stone.

EASTERN FEDERATION SCHEDULES OCTOBER MEET

Newark Mineralogical Society, Newark Lapidary Society and North Jersey Mineralogical Society will be hosts for the second annual convention of the Eastern Federation of Mineralogical and Lapidary Societies October 9 to 11. Club and commercial exhibits are planned, as well as a giant field trip to Franklin, New Jersey.

Galena, zinc, turquoise and chalcedony were sought by Santa Fe Gem and Mineral Club when Verne Byrne led members on a field trip to the Cerrillos Hills.

Raymond Addison demonstrated silver soldering when he spoke on jewelry techniques at a meeting of San Jose Lapidary Society.

A. C. Gustafson demonstrated faceting and polishing of soft materials with a new sapphire polishing head at the March meeting of the Gem Cutters Guild of Los Angeles. Gustafson cut a piece of optical glass with No. 95 carborundum, then polished with No. 400 Burgundy pitch mixed with beeswax and paraffin. Water and Barnsite were used as polishing agent.

Mastodon bones found in Marl deposits in a post-glacial lake in Aurora, Illinois, were described by Prof. Clarence Smith, head of the physics department at Aurora College, for the Chicago Rocks and Minerals Society. The bones were found by workers digging a lake for a public park. The skeletons, though incomplete, were in an excellent state of preservation, due to the large amount of lime in the Marl.

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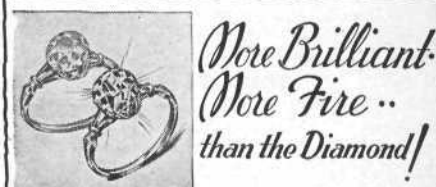
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Amateur Gem Cutter

By LELANDE QUICK, Editor of The Lapidary Journal

Just about the time that we were privately puzzling about using the wrong word at the wrong time and wondering what to do about it, along comes a fine article by the editors of the *Pick and Dop Stick*, official bulletin of the Chicago Rocks and Minerals Society. Entitled "Nomenclature—A Problem of the Societies," it discusses the use of the term rockhound, the misuse of such words as "earth science." It even chides us a little for suggesting that earth science groups emphasizing lapidary activities join the new Lapidary Association. The article chides another writer for referring to their society as a lapidary club. However one could rightly call the Chicago Rocks and Minerals Society, with the official title for its bulletin of the *Pick and Dop Stick*, a lapidary club with as much correctness as calling it a mineral club.

To be absolutely correct, only clubs devoted to the study of geology and the earth's minerals are earth science clubs. The dictionary's definition of the word geology says it is "the science which treats of the history of the earth and its life as recorded in the rocks." Since lapidary clubs not only study lapidary procedure but also gemology, the science of gem minerals or precious rocks, they are really more nearly earth science groups than are fossil collectors. Some groups are definitely not in the earth science classification at all. Collectors of Indian pots, fashioners of silver bracelets and photographers of vacation scenes are not earth science students. Disturbing some old Indian's bones isn't as close to earth science as a speleologist crawling in dark caves among the stalactites.

We used to have a good friend who always dismissed any serious problem in the club by saying "we're only in it for fun." This is a good idea but it has been carried too far and the whole earth science movement could be vastly improved if one member in each society had the courage to get on his feet and say, "I joined this club to get information through study and lectures to help me understand my fun and not for the coffee and doughnuts."

Most societies today have a bulletin of some kind. Most of them cross our desk. They are a lot better than they used to be and they give much information. However sometimes we have to look thoroughly to see what the program was at the last meeting or will be at the next and rarely is there anything to tell what was said. There is very little "science" to some of them. But this is not intended to call down upon our heads again, as we did once before, the wrath of the editors of the good bulletins (editors of the bad ones keep quiet!) but just to make the point once more that too many societies, regardless of their names, have no science in their meetings or their publications—just too much fun.

And so we have come to the conclusion that there just is no one word that takes in the complex groups today in every community who are interested in studying minerals or gem minerals in particular, in geology, paleontology, silvercraft, book-ending or doughnuts. We agree that the term "earth science" is not good and henceforth we are not going to use it. We shall take our cue from the names of the great museums that

feature the things in which our groups are interested and refer to the "natural science" or the "natural history" clubs. They are better terms.

In 1854 Thomas Huxley wrote an essay entitled *On the Educational Value of the Natural History Sciences*. He made a statement that has impressed us very much since we read it. He said—"to a person uneducated in natural history, his country or seaside stroll is a walk through a gallery filled with wonderful works of art, nine tenths of which have their faces turned to the wall."

And isn't that true? So many of our hobby interests are akin that the rockhound in the strictly lapidary club who goes after agate, with no knowledge whatever of geology, is just as guilty of looking at the "pictures turned to the wall" as the moss-back mineral collector who goes after garnet specimens with no idea of gemology in his head.

We repeat that the mineralogical (pompous word!) society needs a talk now and then on gem cutting just as much as the lapidary society needs a talk on geology and mineralogy. We still think that the name "gem and mineral society" is the best descriptive name for our natural history clubs unless they very definitely intend to study nothing but geology (Geological Society of Minnesota) or rock polishing (Los Angeles Lapidary Society). A study of the names of the many societies organized in the last three years indicates that almost ten out of ten groups style themselves as gem and mineral societies or vice versa. Now and then a club will choose a really meaningless name like the Rock Cruisers or Delapidary Club. Several societies have changed their names from the use of the awkward word mineralogical to the combination of the words gem and mineral and the name serves to define them more properly.

Any name should tell what kind of a club it is and where it is located, such as the Los Angeles Lapidary Society or the Gem Cutters Guild of Baltimore. We particularly like the letterhead of one of the oldest societies in the country—Gem Collectors' Club, Inc. of Seattle. Under their name appears a sentence that tells the whole story—"friendly non-profit organization interested in gem cutting, geology and mineralogy."

As for the word rockhound—we never liked it but we have accepted it. The old lady of the publishing world, the staid *National Geographic Magazine*, recently used it right in the title of a big article, but they set it off in quotes. So many people know what the word means that it has become accepted into our language as a word meaning a collector of rocks. It was about 1940 that we first saw the word on a card used by a member of the Seattle Gem Collectors' Club on which was portrayed a dog licking a real rock glued to the card. At that time the "mineralogical" boys used the term for ignorant hammer-happy crystal smashers as a term of contempt. And yet it is a fine example of how the term has come to be accepted in another sense when we cite the following story. In the Fall of 1950 per-

sonnel of the *National Geographic Magazine* were collecting data all over the country for their article published last November on rockhounding. When they reached the Los Angeles area a group from a strictly mineral society took them in tow and off they went on location. Members of the Los Angeles Lapidary Society heard where they went and, not knowing it was another society's affair, they reached the collecting spot a few hours later and identified themselves. They were told by the mineral group that they just were not wanted because "this is to be a story about rockhounds, and lapidaries are not rockhounds." Somewhat amazed at this turn of affairs, and about-face attitude on rockhounds, our friends left. But look at the article—and see all the pictures relating to the lapidaries and their beautiful work.

Right words? Natural history or natural science rather than earth science; mineral instead of mineralogical; rockhound rather than rock hunter or mineralogist and, of course—lapidary rather than lapidarist or lapidist; two terms that never at any time appear in any good magazine.


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By RANDALL HENDERSON

ONE DAY last fall a man and wife came to my office to ask advice about camping equipment. They had never camped out, and they wanted to know about sleeping bags, air mattresses, camp stoves and utensils. They were courteous people and very sincere, and I gave them what help I could.

More recently, on a camping trip, I met them again. They were lugging in wood for their campfire—they and their two daughters, aged six and twelve. They had gotten together a good outfit, and were having a grand time.

And then I learned their story. Their home is in the Los Angeles area, and their children attend the city schools. They have sufficient income to provide well for their daughters—but they know that it requires something besides money to raise wholesome youngsters. They know the demoralizing effect that luxury-without-effort has on the character of youth. They want their children to learn the virtue of simplicity, to be natural and genuine—not sophisticated and snobbish. In the artificial environment of the city and in a home of more-than-average income they realize that they have a critical problem.

They are very intelligent people—and out of their deliberations came the decision to turn to the outdoors for their solution. Not just the kind of outdoor life that consists of long motor tours on paved roads. That kind of activity—or lack of activity—can become very tedious to energetic young people. They would camp out and make a grand adventure of the chores of cooking over an open fire, sleeping on the ground, and exploring the canyons and mountains.

In order to have companions qualified to help and instruct them they joined the Sierra Club, whose members camp in the mountains or on the desert almost every weekend of the year.

To middle-aged people who have never slept on the ground in their lives, the first few nights may not be too comfortable. There are some problems in camping that can be solved only by the trial and error method. But humans who have kept their adaptive functions active can soon adjust to the experience.

When I met this family on a camping trip they were enjoying every minute of it—and I am not sure which members were having the most fun, the girls, or their parents.

As the young ladies grow older, their boy friends will be invited to come along on these trips. At least, that is the plan, and if they are normal young people it will work. With few exceptions, youngsters like camping and exploring—and I can think of no more wholesome environment for them than evenings around the campfire and days spent in close association with the natural things of this earth.

* * *

I have always felt that one of the most worthwhile measures adopted during the depression years of the '30s was the organization of the Civilian Conservation Corps.

It would be hard to over-estimate the good work done by the boys of the CCC during the years they were building trails, campsites, soil conservation works, working at reforestation, and protecting waterholes and landmarks. And while they were carrying out their program for the benefit of all the citizens, they were acquiring training and knowledge of untold value to themselves.

It is unfortunate, I think, that a project so worth while should have been regarded merely as a depression relief measure, and dropped when the emergency had passed.

In the new president's cabinet that is formed after this year's elections I hope there will be at least one voice to speak up in behalf of the restoration of a young men's program patterned after the CCC model—a plan designed for the conservation of both youth and the natural resources of our land. We need such a program in good times no less than in depression years—not merely to provide work for young people, but rather as an opportunity for teen-age boys reared in the artificial environment of the city to gain a first hand knowledge of the natural world in which they live.

Living and working in the outdoors far removed from paved roads and the pampering services of urban life develop a degree of independence and a sense of security unknown to youngsters who are born and raised in the metropolitan areas today.

* * *

Here on the floor of the Colorado desert the wildflowers are at their best as this is written early in April—and this is one of the most gorgeous displays we have seen in many years. Our desert wildflowers are a source of constant amazement to visitors. They come from places where it requires months of careful planting and fertilizing and cultivating to produce colorful flower displays. Their gardens are prim and orderly. Our desert species grow in haphazard arrangement all over the landscape, attended only by the wind and rain and sun. They are rugged little wildlings—but they are no less beautiful than their more civilized cousins.

There is so much in Nature that we do not understand. Why do the verbenas seek the dunes for their habitat, the phacelias the shade of a rock or shrub, the encelia the rocky hillsides? We do not know the answers—but it doesn't matter. In a few days the winds will be distributing the seeds far and wide—to remain dormant in the sand for years perhaps until moisture and temperatures are right for another flowering season. Every lovely blossom on the desert holds the promise of more exquisite flowers in the years ahead, for you and me and for our children. It's a grand place to live—this old earth!

Books of the Southwest

NEW, IMPROVED EDITION OF NEVADA SCENIC GUIDE

Scenic Guide to Nevada was the first publication in the Scenic Guides series. Its success has led to similar reports on other western states and now, six years after its first printing, to a new edition of the Nevada booklet. Written by Weldon F. Heald and illustrated with color and black-and-white halftone pictures, the second edition incorporates several improvements over the first.

Nevada is primarily a mining state, and its ghost towns, old mining camps and present-day mine sites are fascinating places to visit. But the Sagebrush State offers much more to the tourist—the wild beauties of mountain and plain, weird rock formations in Valley of Fire state park, Pyramid Lake, Hoover Dam, Lehman Caves National Monument, Lake Mead, the cosmopolitan cities of Reno and Las Vegas, the history-choked towns of Austin, Winnemucca and Virginia City, "Queen of the Comstock Lode."

Towns and places are listed alphabetically, with cross references, index, maps and pictures. The 80-page booklet falls open to reveal a large map of Nevada on the center pages.

Published by H. C. Johnson. \$1.50.

SCIENCE OF ARCHEOLOGY REVEALS AMERICA'S PAST

How did the first Americans reach this continent, and what was the nature of American life in prehistoric times? These questions are answered by archeology, the study of primitive man through his material remains.

One of the most interesting archeological books written for the layman is Frank C. Hibben's new *Treasure in the Dust*. Dr. Hibben, professor of anthropology at the University of New Mexico, has an extensive background in the study of primitive cultures, and the book is the result of years of research and exploration.

Treasure in the Dust is almost a detective story of archeology, revealing the amazing discoveries unearthed with spade and whisk broom in the frozen mucks of Alaska, the mounds of the Mississippi plains, the cliffs of the Pueblo dwellers and the Mayan and Aztec ruins. It is the dramatic story of ancient man on the American continent from his first arrival across the Bering Strait 30,000 years ago to the coming of the first white settlers.

In no sense an exhaustive study of any one area or culture, Hibben's book rather captures the spirit of different ways of life in ancient America. The amateur archeologist will find it fascinating reading.

Published by J. B. Lippincott Company, 311 pages, 17 halftone illustrations, index. \$5.00.

STORY OF GEOLOGY TOLD IN BIOGRAPHICAL SKETCHES

When a geologist stands on the rim of the Grand Canyon and looks down into that magnificent chasm, the thoughts and impressions that pass through his mind are likely to be quite different from those of the average tourist.

To Carroll Lane Fenton and Mildred Adams Fenton, though for them also the changes of light and scene hold beauty and drama, the fascination of the canyon is contained in the solid meaning of the Inner Gorge itself—

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The story of the Grand Canyon—how it was carved by Nature in a mere 2,000,000 years—is no secret. It is recorded in the cliffs and ledges for all to see. Yet it went unread until 1869 when the first explorers guided battered boats through the treacherous waters of the Colorado River.

The Fentons' *Giants of Geology* attempts to explain the mystery of the earth's formation in a very human way—through a series of biographical sketches of the great men of earth science, from early Greece to modern times.

They tell of Aristotle, the famous Greek philosopher who interpreted the affairs of the earth in terms of natural causes instead of magic and folk gods; and of Steno, an early Danish scientist who wrote the first geologic history of any area. Abraham Werner, James Hutton, Louis Agassiz, James Dwight Dana, Major Powell and others—all the famous names of geology are included.

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Here is a listing of back issues now available, carrying the maps indicated, and also many other maps not mentioned in this list, which has been classified for easy reference:

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